# *Epstein Equestrian Enterprises Inc. v. Frank Jonkman And Sons Ltd., [2013] O.J. No. 2632*

Ontario Judgments

Ontario Superior Court of Justice

T.J. McEwen J.

Heard: September 10-13, 18-21, 24, 25, 27, October 1-4, 9-11,

15-18, 22, 23, 25, 26, 29-31, November 8, 9 and 13, 2012.

Judgment: June 5, 2013.

Court File No. 00-CV-197311CM

**[2013] O.J. No. 2632** | 2013 ONSC 78

Between Epstein Equestrian Enterprises Inc., Plaintiff, and Frank Jonkman And Sons Limited and Cyro Canada Inc., Defendants

(324 paras.)

## Case Summary

**Contracts — Breach of contract — Action by Epstein Equestrian Enterprises for $2,600,000 in damages for negligence and breach of contract dismissed — Epstein entered into a contract with the defendant Jonkman and Sons for the design and installation of a skylight system for a horse riding arena — The skylight system's acrylic sheets subsequently cracked — The skylight system would have functioned properly had an automatic controller been installed — Epstein stubbornly and unreasonably refused to have an automatic controller installed — Epstein was therefore contributorily negligent and breached the contract by failing to allow Jonkman and Sons to complete the contract.**

**Tort law — Negligence — Causation — Contributory negligence — Apportionment of liability — Action by Epstein Equestrian Enterprises for $2,600,000 in damages for negligence and breach of contract dismissed — Epstein entered into a contract with the defendant Jonkman and Sons for the design and installation of a skylight system for a horse riding arena — The skylight system's acrylic sheets subsequently cracked — The skylight system would have functioned properly had an automatic controller been installed — Epstein stubbornly and unreasonably refused to have an automatic controller installed — Epstein was therefore contributorily negligent and breached the contract by failing to allow Jonkman and Sons to complete the contract.**

Action by Epstein Equestrian Enterprises for $2,600,000 in damages for negligence and breach of contract. Epstein owned a horse farm and entered into a stipulated price contract with the defendant Jonkman and Sons for the design and installation of a skylight system for a horse riding arena. The skylight system consisted of a metal framed acrylic skylight and a skylight shutter system. After the installation of the skylight system, there were problems with heat, humidity, condensation and leaking. The acrylic sheets began to crack vertically and horizontally. Epstein took the position that the failure of the skylight system was the result of improper design and construction and was caused or contributed to by the negligence of the defendant Cyro in the design of the acrylic sheets.

HELD: Action dismissed.

Cyro was not negligent in the manufacture of the acrylic sheets. Jonkman and Sons' design of the skylight system resulted in a few, very minor problems which were corrected. The skylight system would have functioned properly had an automatic controller been installed. Epstein stubbornly and unreasonably refused to have an automatic controller installed. Epstein therefore committed a fundamental breach of the contract by failing to allow Jonkman and Sons to complete the contract. Epstein was also contributorily negligent for failing to install the automatic controller. The refusal to allow the automatic controller's installation allowed the condensation on the acrylic sheets to freeze and thaw, which contributed to the cracking. Epstein was 95 per cent responsible for the damages sustained and Cyro was five per cent responsible. No damages were awarded.

## Statutes, Regulations and Rules Cited:

Negligence Act, *R.S.O. 1990, c. N.1, s. 1*, s. 3

Rules of Civil Procedure, *R.R.O. 1990, Reg. 194*,

Sale of Goods Act, *R.S.O. 1990, c. S.1*,

## Counsel

*P. David McCutcheon* and *Jeremy C. Millard*, for the Plaintiff.

*Paul Tushinski* and *Albert Wallrap*, for the Defendant, Frank Jonkman and Sons Limited.

*James Regan* and *Angelo Sciacca,* for the Defendant, Cyro Canada Inc.

**REASONS FOR DECISION**

## T.J. McEWEN J.

**1** This action is brought by the Plaintiff, Epstein Equestrian Enterprises Inc. ("Epstein Equestrian"), against the Defendants, Frank Jonkman and Sons Limited ("Frank Jonkman and Sons") and Cyro Canada Inc. ("Cyro"), for damages arising out of the manufacture and installation of a Skylight System for a horse riding arena ("the riding arena"). The riding arena is located on a horse farm owned by Epstein Equestrian in King City, Ontario ("King Ridge Stables").

**2** As a result of the alleged failure of the Skylight System, Epstein Equestrian claims damages in the amount of approximately $2,600,000.

**3** For the reasons below, I dismiss the action.

**FACTUAL OVERVIEW**

**4** Epstein Equestrian entered into a stipulated price contract ("the Contract") with Frank Jonkman and Sons in which Frank Jonkman and Sons agreed to design and install both a Skylight System (as part of the roof construction of the riding arena) and a Dust Control System in exchange for a payment of $153,001.44, subject to adjustments. The Skylight System consists of two main components: (1) a metal framed acrylic skylight ("the skylight"); and (2) a skylight shutter system ("the shutters"). The Dust Control System uses water to control dust in the riding arena. This dispute only concerns the Skylight System; the design and construction of the Dust Control System is not disputed in this action.

**5** The Skylight System was installed on the north and south sides of the riding arena roof. To construct the skylight, Frank Jonkman and Sons installed extruded sections of aluminum into which white Acrylite SDP 16mm acrylic sheets ("the acrylic sheets") were placed. The acrylic sheets were manufactured by Cyro. There were 36 acrylic sheets on each side of the roof. They started at the peak of the roof and were 21 feet in length. Cedar shake shingles were installed below the skylight and ran to the roof's bottom edge.

**6** The shutters were located approximately one foot below the skylight in the interior of the riding arena and were installed as a motorized, insulated, self-sealing system that could be automatically opened and closed.

**7** The general intent was to open the shutters to allow sunlight to pass through the acrylic sheets and into the riding arena to provide light and heat. The shutters would then be closed to contain the heat. More generally, the shutters were to open and close as necessary in order to maintain a comfortable temperature within the riding arena.

**8** Two cupolas were also installed on the top of the riding arena roof. These were not installed by Frank Jonkman and Sons, but do have some import in the litigation since they had built-in, motorized louvres that could be opened and closed to help control heat and ventilation in the riding arena.

**9** Epstein Equestrian alleges that the Skylight System failed after it was installed. It alleges that the failure was: (1) a result of the improper design and construction of the Skylight System by Frank Jonkman and Sons; and (2) caused or contributed to by the negligence of Cyro in the design of the acrylic sheets.

**10** After the installation of the Skylight System, problems with heat, humidity, condensation and leaking arose in the riding arena, and the acrylic sheets began to crack vertically and horizontally.

**11** In order to better understand the issues between the parties with respect to the alleged deficiencies in the Skylight System, it is useful to provide a description of the Skylight System.

## THE SKYLIGHT SYSTEM

**12** Frank Jonkman and Sons and Cyro had worked together on projects for a number of years, the majority of which involved the construction of commercial greenhouses. Frank Jonkman and Sons and Cyro had developed an installation system for the acrylic sheets, which consisted of extruded pieces of aluminum into which the acrylic sheets would be placed. Frank Jonkman and Sons, in the usual practice, would design, construct and install the aluminum frame. Cyro, which manufactures a number of different types of acrylic products, would manufacture the acrylic sheets that were to be inserted into the aluminum frame. The acrylic sheets are rigid, structurally stiff, insulating glazing sheets made from acrylic. Each sheet consists of two outer walls which are separated and joined by a series of parallel, evenly spaced ribs that run vertically for the length of the sheet. Air gets trapped in the channels formed by the two outer walls and the ribs, which provides additional insulation. One of the attractive features of the acrylic sheets is that the design prevents condensation from forming on the inside surface of the sheets, and if condensation does form, it will either evaporate or drain out of the bottom of the acrylic sheets through holes that are drilled into the bottom of the acrylic sheets upon installation. The Cyro literature provides the following profile of an acrylic sheet, which is useful in assisting one to visualize its design:

**13** The technical data provided by Cyro to Epstein Equestrian in 1992 disclosed the following information with respect to the acrylic sheets:

| | | **Acrylite SDP 16mm Acrylic Sheet** |
|---|---|---|
| Thickness | | 16.00mm ± 1.0mm (0.63" ± 0.04") |
| Width | | 1200mm ± 4.0mm (47.25" ± 0.16") |
| Lengths | 2.4m, 3.0m, 3.6m, 4.8m, 6m, 7.3m (8', 10', 12', 16', 20', 24') Additional lengths available by special order. | |
| Area Weight | | 5kg/m² (approx.) (1.1 lb/ft²) (approx.) |
| Heat Transfer Coeffiecient1(U) | | |
| Summer Conditions | | 3.2W/m2 x °C (0.55 BTU/hour x sq. ft. x °F) |
| Winter Conditions | | 3.3W/m2 x °C (0.58 BTU/hour x sq. ft. x °F) |
| Thermal Resistance Value ($R_T$) | | |
| Summer Conditions | | 1.82°F/BTU hour sq. ft. |
| Winter Conditions | | 1.72°F/BTU hour sq. ft. |
| Coefficient of linear thermal expansion | | 70x $10^{-2}$ in∫in∫°C (40 x $10^{-2}$ in∫in∫°F) |
| Maximum service temp. without load | | 71°C (160°F) |
| Light transmittance (Approx.) | | |
| Clear | | 86% |
| White (#06310) | | 70% |
| Bronze (#43480) | | 52% |
| Bronze (#13770) | | - |
| Solar Transmittance | | |
| Clear | | 83% |
| White (#06310) | | 67% |
| Bronze (#43480) | | 57% |
| Bronze (#13770) | | - |
| Shading Coefficient | | |
| Clear | | 0.98 |
| White (#06310) | | 0.86 |
| Bronze (#43480) | | 0.79 |
| Bronze (#13770) | | - |
| Average Sound Reduction | | 23 dB |
| [1]ASHRAE HAND BOOK OF FUNDAMENTALS | | |

**14** As can be seen in the technical data, there are three types of acrylic sheets: clear, white and bronze. Epstein Equestrian ultimately ordered the white acrylic sheets. The sheets are not white in colour, but rather, they are translucent.

**15** Information is set out in the technical data with respect to light transmittance and solar transmittance. It is important to note that light transmittance and solar transmittance involve two different measurements that are differently calculated. Light transmittance involves the measurement of light waves from the sun and the technical data includes measurements approximating how much light would travel through the acrylic sheets. Solar

transmittance, on the other hand, deals more particularly with the issue of heat and how much heat from the sunlight would pass through the acrylic sheets. The amount of heat that is transferred through the acrylic sheets into a building is referred to as solar heat gain. In order to calculate light transmittance and solar transmittance, different types of the sun's light wavelengths are measured.

**16** The technical data also provides information concerning the shading coefficient for the acrylic sheets. In order to calculate solar heat gain, both the solar transmittance value and the shading coefficient value are needed.

## CHRONOLOGY

**17** It is difficult and unnecessary to recite each and every bit of relevant evidence as the subject matter spans many years. Instead, in order to understand how the disputes arose between the parties, I have provided a year-by-year chronology of events and my findings with respect to the following: the evolution of the design of the Skylight System in the riding arena; the Contract between Epstein Equestrian and Frank Jonkman and Sons; the purchase of the acrylic sheets from Cyro; the design and construction of the Skylight System; and the ultimate problems that arose in the riding arena that led to the cracking of certain acrylic sheets, which resulted in the investigations that followed and this action.

### 1990-1992

**18** Epstein Equestrian is owned and controlled by Seymour Epstein ("Epstein"). Epstein, a successful businessman with a background in engineering, decided in the early 1990s to create and operate an Olympic-quality horse operation in Canada, which involves the breeding, training, showing and selling of horses in the hunter and show jumping categories. To assist him in this venture, he hired Hugh Graham ("Graham"), a highly talented rider and trainer.

**19** Epstein purchased King Ridge Stables in 1992. At the time of the purchase, King Ridge Stables had a seven-stall horse barn and a metal riding arena. In keeping with his goal, Epstein decided to build a first-rate equestrian facility ('the equestrian facility"). Epstein wanted to construct additional stalls, offices, living quarters, a viewing area and a 14,000 square foot (approximately) riding arena. Epstein retained the services of Peter Van Eck ("Van Eck"), who was the existing farm manager at King Ridge Stables. Epstein also hired Bruce Clemmensen ("Clemmensen") as the project manager. Clemmensen's job was to oversee the construction. He was not an architect or an engineer. Although Clemmensen had extensive experience in overseeing construction projects and he studied architecture in university, his experience involving buildings with acrylic installations was limited.

**20** Clemmensen set out to hire the people required to construct the necessary stables, living quarters, offices, viewing area and riding arena.

**21** Clemmensen, knowing Epstein's requirements for the riding arena and his goal of having an Olympic-quality horse operation in Canada, investigated what options might be available to construct a riding arena that was structurally well-built and could be comfortably used year-round. One of the options that Clemmensen was investigating, at Epstein's request, was a riding arena that could be naturally heated without a supplementary heating source. This concept was experimental in nature and came with certain risks. Apparently, it had never been successfully implemented before in Ontario. It would involve the construction of a riding arena that relied only upon solar heat gain while operating 12 months a year. Given this fact, Epstein instructed Clemmensen to assemble a team of suitable, knowledgeable people.

**22** Epstein maintained at trial that he was not closely involved with the decision-making concerning the construction of the riding arena on an ongoing basis and left it to Clemmensen to complete the project. Clemmensen, however, testified that Epstein was directly involved and made all significant decisions on the project. It was Clemmensen's view that he acted as agent for Epstein and carried out Epstein's instructions. Clemmensen's recollection is supported by the following: the evidence of other witnesses; Epstein's ongoing participation with the project; the fact that Epstein reviewed and edited correspondence sent by Clemmensen to third parties working on

the project; and the fact that the building had been exclusively conceptualized by Epstein. The evidence shows that Epstein desired a specific design, was actively involved throughout and had a very good grasp of all of the issues concerning the construction of the entire project, particularly the riding arena. As a result, I accept Clemmensen's testimony that Epstein was closely involved and made all significant decisions on the project.

**23** Clemmensen telephoned Cyro in July 1992. He spoke with John Siemens ("Siemens") a technical manager and a salesman by the name of M. J. Ehmann ("Ehmann"). Clemmensen contacted Cyro because he was aware that it produced acrylic sheets that, when used as a roof, would introduce light and heat into a building. Ehmann recommended using Frank Jonkman and Sons for the installation of the acrylic sheets since Frank Jonkman and Sons had developed a metal framing system.

**24** In the initial discussions between Ehmann and Clemmensen, it was contemplated that the riding arena would be unheated and the Skylight System would only be installed on the south slope of the roof. A memorandum that was prepared by Ehmann indicated that Clemmensen was investigating the construction of an unheated riding arena that would be approximately 14,000 square feet in size. Around this time, Clemmensen also received certain promotional literature from Cyro concerning its products.

**25** Clemmensen had not previously dealt with Cyro, although he did know Frank Jonkman ("Jonkman"), the owner of Frank Jonkman and Sons. Clemmensen and Jonkman had worked together on a 55-unit condominium project which had two 200 foot skylights with an automated shade and ventilation system in an unheated area.

**26** In the summer of 1992, Clemmensen retained the services of Terry Grant and Associates Limited ("Terry Grant and Associates"). Its principal, Terry Grant ("Grant"), was a mechanical and electrical engineer. Grant began looking into design issues concerning the equestrian facility. He prepared reports dealing with normal and glass roofing, air infiltration, temperature and air changes.

**27** In the fall of 1992, Clemmensen retained Mario Kani ("Kani"), a professional engineer who worked as an energy consultant. Clemmensen and Kani met in October 1992 to discuss the project. To better understand the amount and method of heating that was required, Kani agreed to provide Clemmensen assistance with thermal modelling for the equestrian facility, including the riding arena. Kani took into account the fact that the riding arena might not have a supplementary heating system. Kani was also assisting Epstein with his desire to obtain a monetary rebate through Ontario Hydro if Epstein was able to naturally heat portions of the equestrian facility.

**28** From the outset of Kani's work on the project, and prior to the active involvement of Frank Jonkman and Sons and Cyro, Kani's modelling disclosed that there were issues with humidity and the air quality in the riding arena. In fact, the modelling disclosed that there would be several incidents of high humidity in the riding arena, over 90% in the winter months.

**29** Clemmensen continued to liaise with both Kani and Grant, who were also in contact with each other, to determine which supplier and product they should use for the Skylight System. Clemmensen continued to have ongoing discussions with Epstein, keeping him apprised of the results of his investigations.

**30** In 1992, Clemmensen briefly contacted Ken Beach ("Beach"), an employee of Frank Jonkman and Sons. In September 1992, Clemmensen obtained a quote from Beach to purchase and install a skylight, which would include some kind of shading system. It was this concept that ultimately evolved into the Skylight System.

**1993**

**31** Kani continued his modelling for Epstein in 1993. Kani provided ongoing reports dealing with, amongst other things, energy efficiency, thermal comfort, air quality, environmentally appropriate systems, ventilation and cooling. To conduct the modelling, Kani used a computer program called Enerpass, which can perform an energy analysis to track, amongst other things, solar transmittance through the acrylic sheets during all months of the year.

Calculations concerning solar transmittance were important in determining whether supplementary heating was required. The Enerpass program takes into account numerous variables, including the angle of the sun.

**32** During this time, Kani raised the issue of having a supplementary heating system installed in the riding arena as opposed to relying completely on whatever light and solar heat gains that could be obtained through a Skylight System. Kani suggested adding a heater to bring the ambient temperature to five degrees Celsius as he believed that it would make the riding arena more comfortable for its users. Kani estimated the cost of achieving this at $800 per year. Clemmensen sourced a number of supplementary heating options. Kani had ongoing discussions with Clemmensen concerning these issues throughout 1993. Clemmensen testified that Epstein did not want supplementary heating from the very early stages and it was Epstein's decision to make as he was the principal of Epstein Equestrian.

**33** Although Epstein agreed at trial that Kani advised him that supplementary heating may be necessary in early 1993, Epstein testified that Kani's role was a restricted one and Kani was simply assisting in the preparation of the Ontario Hydro application. Epstein disagreed with the correspondence Kani generated in 1993, which indicated that Kani's role was more expansive.

**34** The evidence of Clemmensen and Kani on this point also established that Kani was retained to conduct a great deal of modelling, which included issues of solar transmittance, humidity and ventilation. Kani's role was much more expansive than that described by Epstein.

**35** Therefore, I find that prior to the retention of Frank Jonkman and Sons and the purchase of the Cyro product, Kani and Grant were providing important advice to Epstein Equestrian regarding the issues of heat, ventilation and humidity in the riding arena.

**36** By mid-1993, Clemmensen had assembled a team of consultants to carry out the construction of the equestrian facility. The Project Manual prepared by Clemmensen listed the following consultants:

* Bruce Clemmensen - Project Manager/Construction and Manager
* Allen Associates (Kani) - Energy Conservation Consultant
* Terry Grant and Associates (Grant) - Mechanical and Electrical Engineer
* JBA Engineering Limited ("JBA") - Structural Engineer
* Burnt Architecture - Specifics Consultant/Architectural

**37** Throughout this time period, the various consultants began work on the project and documentation was prepared concerning, amongst other things, the architecture (including architectural drawings), the electrical installation and the wood framing of the riding arena. Kani, and on occasion, Grant, continued to consider the issues of temperature, humidity and ventilation.

**38** Some time in 1993, Epstein testified that he reviewed the Cyro literature. In his words, "bells went off", since one of the brochures disclosed that the Cyro clear acrylic sheets had a solar transmittance of 84% (83% according to the technical data), which was better than glass. He testified that this was very attractive to him since he wanted the sunshine in the riding arena to be much like the sunshine that enters into a greenhouse.

**39** In November of 1993, Frank Jonkman and Sons delivered quotes concerning the installation of the Skylight System. Kani continued to provide Clemmensen with other options from other suppliers. Throughout late 1993, Kani continued to model a riding arena that was both heated and unheated. Clemmensen and Epstein were aware that Kani raised concerns about high levels of condensation. Grant conducted investigations concerning the pros and cons of installing some form of acrylic panels on the roof. Ultimately, Grant conceded that he did not have the necessary expertise in this regard. Although he continued to provide some advice on this issue, from this point on, Grant largely restricted his activities to the other portions of the project, generally the stable areas.

**40** By December 1993, Clemmensen and Kani knew that the Cyro white acrylic sheets (as opposed to the clear acrylic sheets that Epstein read about in the Cyro literature) had a lower solar transmittance of 67%. They also knew that when the acrylic sheets were inserted into the Skylight System, the framing would further reduce the solar transmittance to 57%. Therefore, Epstein Equestrian knew, by this time, that it would not be possible to obtain a solar transmittance close to 84% if it ordered the white acrylic sheets.

**41** On December 7, 1993, a meeting was convened. Epstein, Jonkman and Siemens attended. This was their first and only meeting. There may have been another attendee, perhaps someone from Clemmensen's office, but given the passage of time, the evidence was unclear on this point. Prior to this meeting, personnel from Cyro and Frank Jonkman and Sons had only had sporadic dealings with Clemmensen. The gentlemen discussed the installation of the Skylight System by Frank Jonkman and Sons, using the acrylic sheets manufactured by Cyro.

**42** They discussed a Skylight System whereby the roof of the riding arena on both the north and south sides would be partially covered with acrylic sheets near the top of the roof and partially covered with cedar shake shingles towards the bottom of the roof. Inside, a moveable curtain or shutter would be installed.

**43** Both Jonkman and Siemens testified at trial that they advised Epstein that they did not think a riding arena in King City could be heated solely by solar heat. Jonkman testified that he expressed the concern that snow may cover the acrylic sheets in the winter, which would negatively affect the solar heat gain. Jonkman was also concerned that there were too many windows on the perimeter walls of the riding arena to maintain sufficient heat retention during the winter. Siemens expressed the concern that the concept could not be achieved. Siemens testified that he advised Epstein that he had never heard of a riding arena that could remain unheated by supplementary heating sources "north of the Mason-Dixon Line". Epstein denied that he was advised of these concerns by Jonkman and Siemens. I accept the evidence of Jonkman and Siemens as being credible and reliable given their corroboration of the discussion, their expertise in the area, the fact that this would naturally be a concern since it was a novel concept, and no one who testified at trial was aware of naturally heated riding arenas in this area of the world.

**44** Both Siemens and Jonkman testified that Epstein advised that he had an engineer working on the project and that it was capable of being achieved. I accept that Epstein made this statement since at this time he had Kani providing him with data relevant to this issue. I also accept Siemens's evidence that, during the meeting, only the use of clear acrylic sheets was discussed with Epstein. Overall, as noted, he had a good recollection of what was discussed that was superior to Epstein's. In any event, Jonkman provided Clemmensen with a design concept for the shutters the next day.

**45** On December 10, 1993, Epstein told Clemmensen not to order anything from Cyro or Frank Jonkman and Sons. Ultimately, after Clemmensen conducted further investigations with respect to other roofing systems that might be appropriate, a decision was made to proceed with the Skylight System.

**46** Epstein testified that around the time decisions were being made during the planning stages, he discussed the matter with Alex Turkewitsch ("Turkewitsch"), an engineer working for Frank Jonkman and Sons. Epstein testified that he was "talked into" installing acrylic sheets on the north side of the riding arena roof by Turkewitsch. Epstein testified that Turkewitsch advised that even on cloudy days with equal light from all directions, there would still be more solar heat gain than loss if acrylic sheets were placed on the north side. Epstein stated that he made notes of his discussions with Turkewitsch but lost them.

**47** Turkewitsch denied any involvement with Epstein during the planning stages and testified that they first met in or about September 1994. Turkewitsch testified that he did not become involved in the project until approximately April 1994. By that time, construction of the Skylight System was well under way; therefore, he could not have been involved during the planning stages. The documentation supports Turkewitsch's testimony in this regard. Turkewitsch also testified that only limited solar gain could be obtained through the north side of the riding arena roof. In fact, correspondence generated by Turkewitsch in October 1994 shows that he felt that the shutters on the

north side should always remain closed in winter. Turkewitsch has great experience in this area by way of his education (his Master's thesis involved the study of light transmittance), training and work experience. There is very good reason to believe that he did not make the recommendation alleged by Epstein. I prefer the evidence of Turkewitsch over Epstein in this regard. It is simply more credible and reliable.

**48** Heading into 1994, Epstein decided to pursue this novel concept notwithstanding the concerns of Grant, Kani, Siemens and Jonkman, and the fact that there were serious issues that needed to be addressed concerning ventilation, humidity and whether the riding arena could be satisfactorily heated without the introduction of supplementary heat.

**1994**

**49** In the beginning of 1994, Kani continued with his modelling for the riding arena and expressed his concern to Clemmensen that he had difficulty understanding the design benefits that Epstein considered important. Kani told Clemmensen that a clear skylight on the riding arena roof and no active heating system were unusual criteria in terms of designing a building. Kani also expressed the concern that excessive heat could cause bowing of the acrylic sheets and failure of the seals in the system. Grant was still involved in 1994 and recommended supplementary heating in the equestrian facility as an option. This was not done.

**50** Neither Epstein, nor Clemmensen on his behalf, made efforts to ensure that there was coordination between Cyro/Frank Jonkman and Sons on one hand, and Kani/Grant on the other, to ensure that the construction of the Skylight System was feasible. Jonkman testified that he did not know about Kani's involvement until January 1995.

**51** Jonkman provided a further quote to Clemmensen in February 1994 with respect to the installation of the Skylight System using Cyro clear or white acrylic sheets, and the installation of the Dust Control System. Epstein Equestrian decided to use the white acrylic sheets. Epstein came to this decision after discussing it with Clemmensen and determining that using the white acrylic sheets would reduce shadows in the riding arena, which would be better for the horse riding. While the solar transmittance would be lower, Epstein did not feel that it would be significantly less than the clear acrylic sheets. Kani also concluded that diffused glazing would be better for horse jumping. He continued to provide modelling concerning the Cyro product. Frank Jonkman and Sons created a prototype for the shutters.

**52** Although Clemmensen prepared the Contract to be entered into between Epstein Equestrian and Frank Jonkman and Sons, both Frank Jonkman and Sons and Cyro provided input on the Skylight System specifications included in the Contract. This was one of a number of contracts that Epstein Equestrian entered into with the various trades, consultants and contractors. Relevant portions of the Contract are attached to this judgment as Schedule "A".

**53** Amongst other things, the Contract stipulated that the Skylight System to be installed by Frank Jonkman and Sons included the necessary framing, acrylic sheets and shutters.

**54** For the purposes of clarity, a few items in the Contract should be noted. First, section 07825, part 2, para. 2.1.2, dealt with the acrylic sheets and stipulated as follows:

> **Glazing Sheets:** 16 mm thick cellular acrylic glazing panels with 32 mm wide full length interior hollow cells conforming to CAN 2-12.12-M, in opalescent white colour with a **light transmittance of 70 per cent** and an insulation value of R(winter)=1.72, in 1200 mm width by ± 20 ft (6 m) length as required, acceptable product: Acrylite SDP 16/32 Architectural Plastic Glazing in Colour No. 06310 by Cyro Canada Inc., complete with manufacturer's polyethylene (PEG) gaskets designed to control air movement and seal out debris, supplied for bottom of sheet only. [Emphasis added.]

**55** As noted above, the acrylic sheets were to provide a light transmittance of 70%. However, no wording made its

way into the Contract with respect to the amount of solar transmittance that Epstein Equestrian could expect to receive.

**56** Pursuant to section 12517, part 2, para. 2.1.19, Frank Jonkman and Sons was to install two controller units, known as the DGT Volmatic Caloristat SV 9 ("the Caloristat"), to automatically control the shutters. An array of sensors would be installed both below and above the shutters to measure light intensity, solar radiation and air temperature. Alternatively, para. 1.2.4 in the same section and part allowed for an Alternative Control Computer - the DGT Volmatic LCC 900 (the "LCC 900") - to be purchased to control the shutters.

**57** Jan-Willem Gritters ("Gritters"), a draftsman, prepared the Skylight System drawings for Frank Jonkman and Sons.

**58** Although the Contract specifications were not complete until the summer of 1994, Frank Jonkman and Sons commenced construction of the Skylight System in the spring of 1994.

**59** By July 31, 1994, the acrylic sheets had been completely installed and 95% of the shutters had been installed. The Frank Jonkman and Sons workers did the installation. Jonkman, Turkewitsch and Gritters would periodically attend the site. By the fall of 1994, the Skylight System installation was complete.

**60** In October 1994, Turkewitsch wrote to Clemmensen outlining the capabilities of the Caloristat and inviting suggestions on the best strategies to adopt concerning the operation of the shutters and the installation of sensors. Essentially, the combination of the Caloristat and the sensors would automatically open and close the shutters based on temperature and other settings that could be programmed. Generally, this automatic operation was designed to open the shutters after dawn when a certain adjustable sunlight intensity had been reached and to close the shutters when the sunlight intensity fell below a certain point. However, the shutters would not be limited to this one method of operation. Amongst other things, they could open and close as necessary to control the temperature in the riding arena and avoid excessive build-up of heat between the shutters and the acrylic sheets. Turkewitsch made further recommendations. Even though the cupola louvre controls were not included as part of the Contract, Turkewitsch suggested that they be coordinated with the Skylight System and the Dust Control System to achieve full integration. Turkewitsch then provided an alternative to Caloristat, which he described as an Enhanced Control Package. It had certain advantages over the Caloristat since it allowed for complete integration, which would assist with ventilation, humidity and temperature. Turkewitsch invited Clemmensen to review the proposals and discuss them with him.

**61** In November 1994, Turkewitsch sent Clemmensen information concerning the Enhanced Control Package, which was manufactured by Argus Control Systems Limited ("the Argus controller"). Clemmensen reviewed this system with Turkewitsch. The Argus controller was a sophisticated system that had additional features that could coordinate the operation of the shutters with the existing cupolas and the Dust Control System. Because the Argus controller could coordinate all three systems, it could assist with the control of heat, ventilation and humidity (the Caloristat could not measure humidity). The Argus controller could have been obtained at a cost of approximately $11,000, according to the quote provided by Argus. Epstein rejected both the Caloristat and the Argus controller.

**62** Given the fact that no automatic control system had been agreed to by Epstein at this time, Turkewitsch taught Van Eck how to manually open and close the shutters at certain times, depending upon weather conditions. At that time, it was contemplated that the automatic controller issue would be revisited sometime in the next year.

**63** Clemmensen published a Notice of Substantial Performance for the project on November 15, 1994, even though an automatic controller had not been installed. In December 1994, Jonkman and Clemmensen finally got around to signing the Contract.

**64** In December 1994, the seals that attached the shutters to the tracks along which the shutters would move began to freeze and some modest damage to the shutters resulted. On one occasion that December, Van Eck allowed a co-worker to open the shutters. An operating cable broke and the affected shutter was damaged.

Turkewitsch began to incorporate measures to prevent freezing in the future. These measures included suction deflation of the seals and lubricating the tracks with an anti-stick treatment.

**65** The only written feedback Frank Jonkman and Sons received from Clemmensen concerning the issue of the outstanding automatic controller was in the form of Incomplete and/or Deficient Work Notices.

**66** Epstein's primary explanation at trial as to why he would not consider installing a Caloristat was that it was a simple system and they were discussing incorporating a more sophisticated system that would assist with the cupola louvres. He also testified that the Caloristat was a ridiculous idea since the shutters were freezing and the Caloristat would not work. Turkewitsch disputed this description of the Caloristat. Turkewitsch testified that the Caloristat would have worked because it was designed to wait until a certain temperature was reached, when sufficient solar heat gains could be realized, before the shutters would open. Thus, it would not open when the shutters were frozen. I accept Turkewitsch's view of the capabilities of the Caloristat over the description given by Epstein, given Turkewitsch's expertise in this area.

**67** Epstein further testified that by late 1994, the Skylight System "was a growing disaster" and began to "destroy itself". This evidence is simply not accurate. Although there were some problems with freezing and the damaged shutter, noted above, both Van Eck and Turkewitsch testified that the more significant problems with the Skylight System began much later. Van Eck first recalled minor cracking of the acrylic panels beginning in the fall of 1995. Turkewitsch did not notice cracking until the fall of 1996. I accept their evidence given their ongoing involvement with the riding arena and do not accept Epstein's evidence on this point. Epstein's exaggerated recollection is also not supported by the documentary evidence. There was still plenty of time to deal with the issue of obtaining a proper automatic controller.

**1995**

**68** In early 1995, both Grant and Kani continued to carry out investigations with respect to the ventilation, humidity and condensation issues in the riding arena. Grant was calculating the amount of air that would need to be brought in for proper ventilation. The documentation prepared around this time discloses that Grant and Kani were raising the issue of installing a supplementary heating system into the riding arena.

**69** On January 18, 1995, Kani wrote to Clemmensen addressing a number of issues. Kani expressed frustration over the fact that he was working without a contract and it was unclear how much further he could go without instruction. Kani also stated that it was time that engineering design services be ascribed to either him or Grant or both of them as the present situation made it unclear how the responsibility was to be shared.

**70** In January 1995, Van Eck was instructed by Clemmensen to begin taking temperature and humidity readings in the riding arena below the shutters. The readings that were taken between January 7, 1995 and January 18, 1995 showed high levels of humidity, generally between 80% and 93%. Van Eck testified that there were significant problems with condensation in the winter. To reduce humidity, Van Eck decreased his use of the Dust Control System, since the water it used was increasing humidity in the riding arena.

**71** Epstein testified that around this time, he was shocked to see that the solar transmittance numbers were much lower than he had originally read in the Cyro literature. But, as noted above, Clemmensen and Epstein were aware in December 1993 that the white acrylic sheets, when installed, had a solar transmittance of 57%. Therefore, Epstein knew prior to January 1995, and in fact, prior to installation of the Skylight System, that the actual solar transmittance would not be 84%, but rather, 57%. Epstein testified that he still thought that he could obtain "lots of heat".

**72** Grant continued to explore the installation of a supplementary heat source. In February 1995, Grant wrote to Clemmensen inquiring as to the size of heating system that would be required to prevent the indoor temperature in the riding arena from going down to 35 degrees Fahrenheit.

**73** Turkewitsch remained involved. He continued to try to solve the freezing problem with the shutters and he continued to make recommendations with respect to the installation of an automatic controller.

**74** In March 1995, Clemmensen obtained a quote from a company called Dunford-Liscio (Ontario) Inc. for heating and ventilation systems. Neither of these systems was implemented. At the same time, Kani recommended adding supplementary heat, but Epstein rejected it as a "band aid solution". Kani's involvement essentially ended in March 1995.

**75** A site meeting was convened in April 1995 to deal with various issues, primarily, the problem with the freezing shutters and the automatic controller. There is some confusion as to who was at the meeting, which is not surprising given the passage of time. It was likely that Epstein, Clemmensen, Jonkman and Turkewitsch were there. Epstein and Jonkman debated the installation of an automatic control system. Epstein would not allow one to be installed largely on the basis that he did not agree with the proposed operation of the shutters as it would not attract the amount of solar heat gain that he wished to achieve.

**76** Van Eck continued to operate the shutter system manually throughout 1995. Epstein testified that, in his view, Van Eck was more effective than a Caloristat. I prefer Turkewitsch's evidence that the Caloristat would have been much more effective at operating the shutters than Van Eck. Van Eck agreed that the Caloristat would perform more functions than he did. Van Eck was essentially opening the shutters at dawn and closing them at dusk. During the summer months, however, he testified, that they were generally left open.

**77** Epstein testified that by May 1995, much like his earlier testimony about late 1994, he was overwhelmed by the "massive disaster" that he had on his hands with respect to the damaged Skylight System. As noted, however, the evidence is clear that there was no significant damage to the Skylight System at this time.

**78** In May 1995, Clemmensen received a quotation from Conserval Engineering Inc. ("Conserval"). Conserval identified the high humidity as "the critical problem in this building". Conserval provided an estimate for the installation of jet fans to deal with the high humidity problem. This was not implemented by Epstein Equestrian. In the fall of 1995, Grant continued to deal with the ventilation issue in the riding arena and prepared some drawings of a proposed ventilation system.

**79** Correspondence flowed between Jonkman and Clemmensen concerning the issue of the automatic controller. In his May 3, 1995 letter, Jonkman wrote to Clemmensen, once again urging that some form of automatic controller be installed. In part, Jonkman wrote as follows:

> It was our assumption that this caloristat would work in the method that we had envisioned the system to operate.
>
> Our understanding of the operation of the system was that the panel system would be closed at night, open at daybreak, close during periods of high light intensity, close at night, would close if the temperature fell below a predetermined temperature and would not open up until the air temperature above the panel had attained a temperature sufficient to add heat to the building.
>
> The thought that the seal would freeze to the aluminium extrusion had not occurred to us since the assumption was that the air temperature above the panel would heat up at least 50 degree F before it would be beneficial to open the panel system.
>
> It appears that Mr Epstein does not agree with this method of operation and as a result of computer models they have determined that at air temperatures below freezing there is still the opportunity to gain heat from solar radiation, even on cloudy overcast days.

**80** The correspondence generated between Clemmensen and Jonkman during this time demonstrates that Epstein continued to resist the installation of the Caloristat on the basis that it would interfere with the solar heat gains he desired. In my view, based on Epstein's own evidence, this was unreasonable in light of the fact that he had known

for some time that the solar transmittance would not be 84% and he would not be able to achieve the solar heat gains that he desired. Further, Jonkman and Turkewitsch had been telling him that the Caloristat was the best solution to the problems they were experiencing with heat building up between the shutters and the skylight. Turkewitsch also explained to Epstein and Clemmensen that the Caloristat would have operated so that the shutters would not open until sufficient solar heat gains could be made, which would offset the losses in solar heat gains that Epstein was concerned would occur while waiting for the shutters to open. Lastly, Epstein Equestrian's position that the shutters should essentially open at dawn and close at dusk is not borne out by the provisions of the Contract which provided the following in section 12517, part 1, para. 1.2.3 h.(iii):

> After dawn, controller opens shutter system when a certain adjustable sunlight intensity is reached and closes system when sunlight intensity falls below that point again. A timer avoids rapid cycling.

**81** In June 1995, Clemmensen wrote to Jonkman. The letter suggested a significant alteration to Turkewitsch's envisioned operation of the shutters. The proposed changes were contrary to the instructions that Turkewitsch had given to Van Eck. Particularly, Clemmensen proposed that the shutters should be closed in the summer when there was bright sun, as opposed to Turkewitsch's belief that they should be opened.

**82** Clemmensen also demanded the following: (i) the project had to be completed in conformance with the Contract; (ii) the shutters had to be able to operate in the automatic mode for the whole year; (iii) the freezing problem had to be resolved; and (iv) a safeguard to prevent further damage had to be provided.

**83** In July 1995, Jonkman wrote to Clemmensen again, indicating that if Epstein Equestrian installed an automatic control system, it would rectify the problem with the shutters freezing to the track system, which was causing damage and operational difficulties. A further dispute arose as to whether the problem with the freezing of the shutters was even part of the original scope of work because the controller system Frank Jonkman and Sons had proposed would not have allowed this to happen. Once again, Jonkman urged Clemmensen and Epstein to have the system automated, either working with his company or another company of Epstein's choice. Jonkman stated that the damage to the shutters from heat build-up was due to the failure to automate the system.

**84** In addition to exchanging correspondence, Jonkman, Turkewitsch and Clemmensen continued to meet to try to resolve the issues of condensation above the shutters, the freezing of the shutters and the automatic controller installation.

**85** September 1995 was a critical month. On September 23, 1995, Jonkman wrote to Clemmensen setting out, in great detail, the history of their proposals concerning the installation of an automatic controller. In the letter, Jonkman stated that Epstein was not content with installing the Caloristat. He pointed out that the Caloristat was no longer being manufactured and recommended the Argus controller again.

**86** On September 27, 1995, Clemmensen wrote to Jonkman advising that, amongst other things, he was of the view that, as part of the original Contract, Frank Jonkman and Sons should find a way to introduce outside air into the space above the shutters during cold weather to balance the humidity and temperature. He added that he also wanted Frank Jonkman and Sons, as an extra to the Contract, to ventilate the space above the shutters to the exterior during sunny summer weather or at times when the shutters were closed and the space between the shutters and the skylight warmed significantly. This establishes, in my view, the vagueness of Epstein Equestrian's expectations of Frank Jonkman and Sons as set out in the Contract. It further illustrates the fact that Epstein Equestrian accepted that ventilation between the shutters and the skylight was outside the scope of the Contract. This is consistent with Epstein's evidence that Frank Jonkman and Sons was not in charge of the humidity levels or ventilation within the riding arena.

**87** On September 29, 1995, Turkewitsch wrote to Clemmensen offering to install an alternative controller, the LCC 90 system (the "LCC 90"). The manufacturer of the Caloristat had replaced it with the LCC 90. Although Jonkman did not recommend the LCC 90 in his September 23, 1995 letter, Turkewitsch explained that the LCC 90 was fully compatible with the LCC 900, which was the alternative control system described in the Contract. The cost would

be somewhat higher than the original Caloristat, the difference being at least $7,000. Turkewitsch, in great detail, set out the benefits of installing the LCC 90, specifically stating that it would resolve the overheating of the air space between the shutters and the skylight, that it would reduce and probably eliminate condensation drips from the skylight and that this system was the best method of dealing with the freezing seals and the sticking shutters. Turkewitsch further advised that if Epstein was not satisfied with the operation of the LCC 90, it would be removed and Epstein Equestrian would be credited with 100% of the amount paid to be used for another system.

**88** In October 1995, Clemmensen, as was his usual practice, prepared a draft response to be approved by Epstein. In the draft response, Clemmensen agreed, in principle, to have the LCC 90 installed. He wrote:

> Your proposal to install the enhanced control system, conditional that it satisfy the requirements in practice, and the items noted herein, is accepted in principle.
>
> If the system does not satisfy the requirements in practice the system will be removed and a credit in the full amount paid against another as yet undetermined system is to be provided.

**89** Clemmensen discussed the matter with Epstein. Epstein refused to install the LCC 90. At Epstein's direction, Clemmensen's letter was redrafted and Turkewitsch's offer to install the LCC 90 was rejected. In the final draft, Clemmensen wrote:

> Further to your letter of September 29, 1995, I have reviewed your proposal with the owner. Unfortunately our discussions to date with your company have not lead to the completion of a system that satisfies the original intent of the work as described in the Contract documents. This condition cannot be allowed to continue through another winter.
>
> ...
>
> Failure to correct this default will result in the Owner, without prejudice to any other right or remedy he may have, terminating your right to continue with the work and to finish the work by whatever method he may consider expedient, but without undue delay or expense, and withhold further payments from you until the work is finished.

**90** Clemmensen testified at trial that he could not recall why Epstein refused the recommendation. Epstein also could not recall why a controller was not installed. Turkewitsch testified that he believed that the information set out in his September 29, 1995 letter addressed the concerns of Epstein, the issues that had arisen, and presented a solution that Frank Jonkman and Sons felt would work. Turkewitsch further testified that he was puzzled by the refusal. In a subsequent conversation with Clemmensen, he recalled that Clemmensen did not give a clear answer as to why the proposal was rejected.

**91** By this time, Epstein was contemplating commencing legal action against Frank Jonkman and Sons. In the letter that Clemmensen ultimately sent to Jonkman on October 18, 1995, he advised that Epstein Equestrian took the position that Frank Jonkman and Sons was in default of its contractual obligations.

**92** It now became clear that Frank Jonkman and Sons could not complete the Contract by installing an automatic controller since all of its recommendations had been rejected. It had no further options to offer. In a letter dated October 19, 1995, Jonkman confirmed that Frank Jonkman and Sons had exhausted its resources in attempting to find an automatic control system that would please Epstein.

**93** In November 1995, subsequent to a meeting, Turkewitsch prepared certain calculations concerning the use of a fan to ventilate the area between the skylight and the shutters. For reasons unknown to him, Epstein Equestrian did not pursue this option.

**94** In the fall of 1995, Van Eck noticed four or five minor cracks in the acrylic sheets emanating from the edges

where they were fixed to the framing. He believed that Turkewitsch saw them as well, although Turkewitsch testified that he did not note any cracking until the fall of 1996. The winter of 1995 arrived with Van Eck still manually operating the shutter system.

**95** Epstein testified that by the end of 1995, water leaking through the skylights was making the riding arena dangerous and although it could be used on some days in the winter, it was generally becoming impossible to use as time went on. I do not accept this evidence that the state of the riding arena was this dire at this early stage. This evidence was not supported by the other witnesses, including Van Eck.

**1996**

**96** During January 1996, the problem with the freezing seals continued. Turkewitsch continued to deal with this issue. Epstein continued to use the riding arena in the winter months notwithstanding the problems that had developed.

**97** Electric heaters were installed at some point in time below the side windows of the riding arena to deal with condensation on and around the windows. Although the evidence was somewhat contridictory as to when the installation took place, it likely occurred some time during 1996. It appears as though the increase of heat through the electric heaters solved the condensation problem in these areas.

**98** In the summer of 1996, Turkewitsch left the employ of Frank Jonkman and Sons and took up employment elsewhere. He also did consulting work and began providing assistance directly to Epstein on the riding arena issues in the fall of 1996.

**99** Throughout the fall of 1996, Clemmensen continued to write to Frank Jonkman and Sons advising of incomplete and/or deficient items that Epstein wanted Frank Jonkman and Sons to complete or rectify. One item included the installation of an automatic control system, despite the fact that Epstein had refused to accept the three types of control systems recommended by Frank Jonkman and Sons.

**100** Van Eck continued to manually operate the shutters and would periodically check the temperatures in the riding arena, including temperatures in the area between the shutters and the skylight. Van Eck testified that on about three occasions, the temperature in the area between the skylight and the shutters was in the range of 150 degrees Fahrenheit, but never exceeded 160 degrees Fahrenheit, which, according to the technical data, was the maximum service temperature that the acrylic sheets were to be exposed to over a long term. Van Eck's operation of the shutters was not in accordance with the schedule that would have been followed had the automatic controller been installed and was subjecting the area between the skylight and the shutters to temperatures, at least on occasion, very close to the maximum service temperature.

**101** Finally, after more correspondence was exchanged in the fall of 1996, Jonkman advised Clemmensen that Frank Jonkman and Sons was not prepared to do any further work on deficiencies or warranty items until the remainder of its account was paid, and that he was uncomfortable with the situation that had developed. Frank Jonkman and Sons did no further work on the riding arena after Turkewitsch left the company and the aforementioned correspondence was exchanged. Epstein Equestrian never paid the remaining $2,991.92 due under the Contract. In total, it paid Frank Jonkman and Sons $162,956.52.

**102** In the fall of 1996, Van Eck saw more cracking in the acrylic sheets, but nothing that he thought to be significant. Most of the cracks were horizontal, some were vertical. While inspecting the roof during a site visit in October 1996, Turkewitsch noted that the seals were now performing adequately, although they were still a bit of a nuisance. Turkewitsch also noted that there was one cracked acrylic sheet that he believed cracked due to insufficient clearance for thermal expansion.

**103** Van Eck testified that around the fall of 1996, on one or two occasions, he used acrylic sheets leftover from the original installation to replace damaged acrylic sheets.

**104** Turkewitsch attended at the riding arena on a number of occasions in October 1996. In his report of November 1, 1996, he set out the discussions he had with David Landsberg ("Landsberg"), an expert in ventilation. Turkewitsch reported to Clemmensen that he and Landsberg agreed that forced ventilation would ensure that there was proper air exchange to help deal with issue of summer cooling. Turkewitsch recommended that the control of summer cooling should be by way of a multi-stage thermostat or integrated controller and proposed a sequence of operations involving the cupola louvres and Skylight System. This was not done.

**1997**

**105** Turkewitsch continued to speak with Clemmensen about installing an automatic controller in early 1997, but never received approval. Turkewitsch also continued to repair problems with the shutters, which included problems with bolts causing damage in the Skylight System and the misalignment of pulley wheels.

**106** In August 1997, Turkewitsch noted that there was cracking in the acrylic sheets, including one acrylic sheet near the cupola and some acrylic sheets on the south side. There were cracks as long as 12 inches in a vertical pattern, as well as radial cracks at the bottom corners of the acrylic sheets. In the summer of 1997, Clemmensen hired Rob Purves ("Purves") to do some repairs on the acrylic sheets. Turkewitsch testified that he and Purves did not think the cracking was a result of the installation performed by Frank Jonkman and Sons.

**107** On November 10, 1997, Turkewitsch, Siemens and Van Eck attended King Ridge Stables to inspect the cracked acrylic sheets. Turkewitsch noted that there were now four acrylic sheets with horizontal cracks. Arrangements were made for Epstein to purchase six new acrylic sheets directly from Cyro at a 50% discount to replace the damaged acrylic sheets. Due to the onset of winter, it was decided that installation should be delayed until the spring of 1998.

**108** In December 1997, Clemmensen commissioned a report from consulting engineers, Buchan, Lawton, Parent Limited ("Buchan"). They investigated the indoor air quality and its effects on health in the equestrian facility. Buchan's report stated that, amongst other things, the carbon dioxide levels were above acceptable standards in the riding arena. The report concluded that overall, there was a ventilation problem at the facility, as well as high humidity, which was described as "a key link to health problems associated with the facility." Specifically, it was noted that the riding arena was passively ventilated. Its ventilation was wholly dependent on leakage through roof vents, the building envelope and its attachment to the other two wings of the building. The equestrian facility was only receiving one-half to two-thirds of the ventilation it required. A number of recommendations were made for the entire equestrian facility, including modifications to the ventilation system. Buchan's recommendations were not implemented.

**1998**

**109** Some of the acrylic sheets that were ordered in 1997 were installed in the spring of 1998 by Van Eck to replace the cracked acrylic sheets.

**110** Turkewitsch continued to work with Clemmensen to try to remedy the ongoing cracking of the acrylic sheets. In the fall of 1998, Turkewitsch contacted Siemens to request a report on the November 1997 site visit, as well as to arrange for another site visit in light of the fact that the acrylic sheets continued to crack.

**111** It was now evident that there were four types of cracking:

* The one cracked acrylic sheet in the area of the cupola which was replaced.
* Radial cracking from the corners of the sheets that was not widespread and was of a minor nature.
* Vertical cracking which emanated from the bottom of the acrylic sheets and was an ongoing problem.

* Horizontal cracking across the sheets which was occurring on an ongoing basis and was the most significant problem.

**112** The first two types of cracking were of a very minor nature and there was little, if any, evidence to suggest that those types of cracking occurred as a result of the negligence of the Defendants. It is the latter two types of cracking that are the focus of this litigation. Most of this cracking occurred on the south side. The majority of the cracking was horizontal with some vertical cracking.

**113** In 1998, Epstein purchased a farm in Ocala, Florida ("King Ridge South"), purportedly as a result of the ongoing problems that the riding arena was experiencing with the Skylight System, particularly the cracked acrylic sheets. The next year, Epstein began transporting his horses between King Ridge Stables and King Ridge South so that training could continue in the winter months.

**114** Another site meeting occurred on November 2, 1998, at which time Clemmensen, Van Eck, Turkewitsch, Siemens and another Cyro employee, John Redmond, attended King Ridge Stables to inspect the acrylic sheets. There is no exact record of the number of acrylic sheets that were cracked, although it is not disputed that it was an ongoing and growing problem.

**115** During the November 1998 meeting, Siemens decided that Cyro should test the acrylic sheets to determine if they were within manufacturing standards in order to ascertain whether the cracking problems were material-related. Siemens obtained a piece of an acrylic sheet located in the snow near another building in what he described as a "pile of junk". He broke off a piece of the acrylic sheet for testing. Van Eck confirmed that certain discarded acrylic sheets were kept in "the trash". Siemens sent the piece of acrylic to the Cyro laboratory in Orange, Connecticut for testing. For shipping ease, the piece of acrylic was cut into two pieces. A battery of tests was run on the two pieces. Siemens, who wanted to determine whether the Cyro acrylic sheet was within manufacturing standards, did not order any testing with respect to light transmittance, since there were no suggestions that light transmittance was an issue at that time.

**116** Several tests were carried out by Cyro. The tests analyzed the degradation/deterioration of the sheet, gasket compatibility, compression, whether the sheet had been properly cured, molecular weight, discoloration and impact/brittleness. The testing confirmed that the Cyro sheet was within manufacturing standards and the cracking problems were not material-related.

**117** One additional test was carried out, however, that was not ordered by Siemens. This involved a calculation of light transmittance. The light transmittance of the first sample was 53.5% and the second sample was 50.4%, which is well below the 70% claimed by Cyro in its literature and stated in the Contract.

**118** As previously discussed, light transmittance and solar transmittance are two different measurements and are calculated differently. The measurement of solar transmittance deals more particularly with heat. The acrylic sheet was not tested for solar transmittance.

**119** Siemens did not disclose the fact that light transmittance testing had been carried out and was not in compliance with manufacturing standards to Turkewitsch, Clemmensen or Epstein. The reasons, he explained at trial, were that no one discussed light transmittance as a potential problem relevant to the cracking, he did not ask for the testing, the testing was not carried out in accordance with the usual Cyro protocol and the issue of light transmittance was not raised until after the litigation was commenced.

**1999**

**120** Siemens prepared a draft letter to send to Clemmensen and had it reviewed by Turkewitsch. It was then sent to Clemmensen on March 22, 1999. The letter dealt with a number of issues, but with respect to the Cyro testing, Siemens concluded that the acrylic sheet was within manufacturing standards and the cracking was not material-

related. Once again, Siemens did not disclose the fact that light transmittance testing had been carried out to Turkewitsch or Clemmensen.

**121** Clemmensen subsequently sent a copy of Siemens's letter to Frank Jonkman and Sons. Jonkman responded in June 1999, denying liability and declining to participate any further. In October 1999, Turkewitsch provided a comprehensive letter to Clemmensen discussing the cracking of the acrylic sheets. He concluded, amongst other things, that further information was required from Cyro concerning manufacturing standards and test descriptions. He did not believe that the horizontal cracks were a result of installation, but rather, he believed they were most likely a result of excessive heat build-up and an extreme temperature differential across the sheet. Turkewitsch also concluded that frost damage from condensation freezing at the bottom of the acrylic sheets was a believable explanation for the smaller vertical cracks. It is clear from Turkewitsch's evidence, and the evidence overall, that the horizontal cracks were much more significant than the vertical cracks and were causing the majority of the damage to the acrylic sheets. Since he did not know the exact cause of the horizontal cracking, Turkewitsch did not recommend a large scale acrylic replacement. Turkewitsch recommended that a consultant be hired, and again, he recommended the installation of an automatic control system. It was not implemented.

**122** In the meantime, Cyro had developed a new, more durable product called Impact Modified SDP 16mm ("Impact Modified"), which was discussed between Clemmensen and Turkewitsch, and a quote was provided for installation.

**123** Several horses were shipped to King Ridge South for the winter. Epstein decided to put off the decision about replacing the acrylic sheets until 2000.

**2000 to Present**

**124** In February 2000, Turkewitsch provided Clemmensen with a report concerning a number of issues and recommended the Argus controller again. Turkewitsch's involvement ended in late 2000.

**125** In 2000 and up to the present, Epstein continued to send his horses to King Ridge South for the winter months as he deemed the riding arena unsuitable during this time given the problems with the cracked acrylic sheets.

**126** Epstein Equestrian commenced the action against Frank Jonkman and Sons and Cyro on September 15, 2000.

**127** In early 2004, Clemmensen retained Brook Van Dalen and Associates Limited, an engineering firm which specializes in the design and performance of building façade systems. Specifically, Clemmensen dealt with Mark Brook ("Brook") of that company. Brook investigated options to replace the Skylight System.

**128** In April 2004, Brook provided Clemmensen with a report on various forms of skylight installations. Brook also recommended the use of supplementary heat. After further correspondence from Brook to Clemmensen during the spring and summer of 2004, in August 2004, Clemmensen wrote to Brook advising that any decisions concerning the installation of a skylight system would be delayed as Epstein wanted to allow the legal actions to progress further. None of Brook's proposals have been implemented to date.

**129** In 2004, Clemmensen received another heating proposal for the riding arena, this one from Schomberg Heating. The recommended heating plan was not accepted.

**130** In 2005, the Skylight System on the north side was replaced with cedar shake shingles. The north side roof now consists entirely of cedar shake shingles. The usable acrylic sheets from the north side were used to replace damaged acrylic sheets on the south side. The majority of the acrylic sheets on the south side had to be replaced. Van Eck stopped manually operating the shutters in 2006.

**131** The shutters have not been operated since that time and the Skylight System on the south side remains in

place. Most of the acrylic sheets have vertical and horizontal cracks. By 2010, Van Eck testified that 22 of the 36 remaining sheets on the south side were cracked. Leaking continues to cause ongoing staining of the wooden timbers and drywall ceilings in the riding arena. Graham testified that the leaks have become so significant that when it rains, one can "have a shower" in the riding arena.

## THE THIRD PARTY ACTION, PIERRINGER AGREEMENT AND APPORTIONMENT OF LIABILITY

**132** Subsequent to the delivery of the Statement of Claim in this action, Cyro commenced a third party action against Clemmensen and Kani. Ultimately, Epstein Equestrian entered into direct settlements with Clemmensen and Kani by way of Pierringer Agreements. Redacted copies of the agreement were provided to me at trial. After hearing submissions from the parties, I agreed with counsel for the Defendants that, pursuant to my oral reasons given, I could review the agreement but I would not review the amounts of the settlements which were redacted. A copy has been attached to this judgment as Schedule "B".

**133** Nonetheless, any analysis of liability that I undertake must include an analysis of the alleged negligence of Clemmensen and Kani as per the provisions of the *Negligence Act*, *R.S.O. 1990 c. N.1, s. 1*: see *M. (J.) v. B. (W.) (2004), 71 O.R. (3d) 171* (C.A.). All parties agreed with this approach.

## ISSUES

**134** The following issues are left to be determined:

I. Was Frank Jonkman and Sons negligent or in breach of its Contract with Epstein Equestrian?

II. Was Cyro negligent in the manufacture of its acrylic sheets?

III. Did Cyro make negligent misrepresentations with respect to the quality of its acrylic sheets?

IV. Is there an issue of spoliation with respect to Cyro destroying relevant documents and the acrylic sheets that it tested?

V. Was Clemmensen negligent?

VI. Was Kani negligent?

VII. Did Epstein Equestrian breach its Contract with Frank Jonkman and Sons and/or was it contributorily negligent?

VIII. Causation

IX. Apportionment of liability

X. Assessment of damages

XI. Mitigation

## ANALYSIS

### I. Was Frank Jonkman and Sons negligent or in breach of its Contract with Epstein Equestrian?

**135** For the reasons set out below, I dismiss Epstein Equestrian's claim against Frank Jonkman and Sons.

**136** Epstein Equestrian pursued claims against Frank Jonkman and Sons in both negligence and breach of

contract. This type of dual pleading can cause difficulties if a plaintiff seeks to pursue a concurrent liability in tort that would permit the plaintiff to circumvent a contractual exclusion or limitation of liability for the act or omission that would constitute the tort: see *Allarco Entertainment 2008 Inc. v. Rogers Communications Inc.*, 2011 ONSC 5623, 92 C.C.L.T. (3d) 213. In this case, Epstein Equestrian concedes that it is not pursuing Frank Jonkman and Sons for any claims that would not be allowed under the terms and conditions of the Contract. In other words, it does not seek to circumvent a contractual exclusion or limitation of liability. Accordingly, although Epstein Equestrian pursues claims in both negligence and breach of contract, it is the terms and conditions of the Contract that will govern.

**137** General Condition (GC) 14.12 of the Contract provides:

> As of the date of Total Performance of the Work, as set out in the certificate of Total Performance of the Work, **the Owner expressly waives and releases the Contractor from all claims against the Contractor including without limitation those that might arise from the negligence or breach of contract by the Contractor except one or more of the following:**
>
> (a) those made in writing prior to the date of Total Performance of the Work and still unsettled;
>
> (b) those arising from the provisions of GC 19 - INDEMNIFICATION or GC 24 - WARRANTY;
>
> ...
>
> (c) those made in writing within a period of six years from the date of Substantial Performance of the Work, as set out in the certificate of Substantial Performance of the Work, or within such shorter period as may be prescribed by any limitation statute of the province or territory of the Place of the Work and **arising from any liability of the Contractor for damages resulting from his performance of the Contract with respect to substantial defects or deficiencies in the Work for which the Contractor is proven responsible.**
>
> **As used herein "substantial defects or deficiencies" means those defects or deficiencies in the Work which affect the Work to such an extent or in such a manner that a significant part or the whole of the Work is unfit for the purpose intended by the Contract Documents.** [Emphasis added.]

**138** The allegations by Epstein Equestrian against Frank Jonkman and Sons fall into two categories: design and construction.

**139** The alleged design deficiencies are as follows:

(a) No engineer was involved in the design of the skylight or shutters.

(b) Frank Jonkman and Sons was not fully versed with respect to the specifications of the Cyro acrylic product.

(c) Frank Jonkman and Sons routinely destroyed Cyro technical information bulletins, and thus, did not have them for review.

(d) Frank Jonkman and Sons did not take into account special Cyro installation requirements.

(e) The drawings prepared by Frank Jonkman and Sons with respect to the shutter design were not stamped by an engineer.

(f) The design was not watertight.

(g) The design allowed the shutters to persistently freeze.

(h) The design allowed the bolts in the shutters to cause damage to the shutters when they moved.

**140** In my view, all of these claims must fail. With respect to the design deficiency allegations, (a) - (d), the

evidence at trial established, in my view, that Jonkman had sufficient experience to design the Skylight System in question. He and his staff were well-versed in the specifications of the Cyro acrylic product and took into account all special installation requirements. Jonkman conceded that he did destroy Cyro technical information bulletins, but in my view, nothing turns on this fact given his experience and expertise. In any event, there is no specific evidence suggesting that the bulletins contained something that he failed to do or ought not to have done.

**141** With respect to (e), it is clear that the Contract required an engineer to stamp the drawings prepared by Frank Jonkman and Sons (see section 07825, part 1, para. 1.4.1). This was not done. Although this would constitute a breach of the Contract, in my view, nothing turns on this failure. There was no evidence at trial suggesting that the failure to have the drawings stamped by an engineer caused Frank Jonkman and Sons to install a Skylight System that was deficient. Epstein Equestrian did not adduce any evidence from Epstein, Clemmensen or any of the other lay witnesses to suggest that the failure to stamp the drawings by an engineer was in any way material or caused the damages alleged by Epstein Equestrian. In fact, no expert evidence was called with respect to the design of the Skylight System at all. Lastly, Epstein Equestrian never insisted that the drawings be stamped by an engineer.

**142** With respect to (f), the evidence adduced at trial established that Frank Jonkman and Sons's design of the Skylight System, in and of itself, resulted in a few, very minor problems with leaking that were corrected. The major leakage problems were ultimately linked to the cracking of the acrylic sheets and not to the watertightness of the Skylight System. To the extent that the skylight allowed humid air to be introduced into the one foot space between the skylight and the shutters, thus causing condensation, I do not accept that this constitutes negligence on the part of Frank Jonkman and Sons. As discussed throughout the body of this judgment, there were significant problems with ventilation, humidity and condensation as a result of the design of the riding arena. Turkewitsch testified that had the automatic controller been installed, as was repeatedly recommended, the condensation between the skylight and the shutters could have been controlled. Therefore, I find that the overall Skylight System, as designed, would have functioned properly had it been installed in its entirety, which would include the installation of an automatic controller.

**143** With respect to (g), there were unanticipated problems with freezing in the shutters. In my view, this does not constitute a breach of the Contract or negligence. It was envisioned that temperatures within the riding arena could fall below zero, and proper operation of the shutters, as recommended by Frank Jonkman and Sons, would have allowed for the shutters to thaw before opening and to operate normally. Even though there were certain problems, particularly with the seals in the Skylight System freezing, this issue was being adequately dealt with by Turkewitsch and Van Eck. If an automatic controller had been installed, the shutters would have been capable of proper operation.

**144** With respect to (h), damage to the shutters was caused by bolts catching within the shutters. These minor issues were resolved by Turkewitsch. They do not amount to a breach of the Contract let alone a fundamental breach, or negligence, but rather, should be considered a part of the normal maintenance required in a project such as this one.

**145** I now turn to the allegations concerning construction. These are as follows:

(a) The installers did not have or review the installation manual.

(b) Cyro technical information bulletins were not made available to the installers because they were destroyed by Frank Jonkman and Sons.

(c) There was no checklist for the installers to determine what to do or what was done by them.

(d) There was inconsistent supervision by Jonkman.

(e) Frank Jonkman and Sons did not provide any special installation instructions, including instructions to ensure that the shutters were kept open during construction to prevent overheating.

(f) Frank Jonkman and Sons did not install temperature sensors during construction.

**146** With respect to allegations (a) - (d), no evidence was adduced at trial to suggest that the failure of the installers to review an installation manual, check Cyro technical information bulletins, have a checklist, or be regularly supervised by Jonkman, was in any way negligent or a breach of the Contract, or caused any damage. Frank Jonkman and Sons had an experienced crew of installers who had installed various skylight systems on other occasions. There was nothing to suggest that the protocol followed in this instance was deficient. With respect to the horizontal cracking, Turkewitsch testified that he did not believe that it stemmed from the installation of the acrylic sheets. I accept his evidence. In any event, based on the evidence at trial - the expertise of the crew and the periodic site attendance by Gritters, Turkewitsch and Jonkman - I do not find that Frank Jonkman and Sons provided inconsistent supervision.

**147** The main thrust of Epstein Equestrian's submissions against Frank Jonkman and Sons with respect to the issue of construction involved items (e) and (f) - namely, that Jonkman did not provide any special installation instructions during construction to ensure that the shutters were left open and that Frank Jonkman and Sons should have installed temperature sensors to monitor heating issues in the area of the Skylight System and to prevent overheating of the acrylic sheets. Epstein Equestrian submits that this is the only real and reasonable explanation as to why the acrylic sheets *could* have overheated and suffered the extensive horizontal cracking.

**148** The difficulty with this submission is that there was no evidence led at trial as to whether the shutters were left open or closed during construction or whether overheating resulted. Epstein Equestrian submits that since Frank Jonkman and Sons had control of the riding arena during installation and it was their personnel on site performing the construction, I should draw an adverse inference or impose a reverse onus on Frank Jonkman and Sons. I am not prepared to do so. First, Epstein Equestrian could have easily obtained the names of the Frank Jonkman and Sons workers who were on site and called them at trial. Second, Epstein Equestrian personnel were also on site during the installation of the Skylight System and provided no testimony on this issue. Third, no expert evidence was adduced at trial to suggest that the manner of construction that was carried out by Frank Jonkman and Sons was deficient. Fourth, there was no evidence that the acrylic sheets were significantly damaged by the horizontal cracking prior to the fall of 1996. Finally, no case law was provided to support the submission that an adverse inference should be drawn or a reverse onus should be imposed in this kind of situation.

**149** As a result, there is no evidence to suggest that the installation in the summer of 1994 caused or contributed to the ultimate failure of the Skylight System. There is only speculation. This allegation is even more speculative when one considers the fact that Epstein Equestrian had Van Eck operate the shutters manually for approximately two years before the horizontal cracking of the acrylic sheets occurred. Van Eck struck me as an honest witness who applied himself the best he could to the operation of the shutters. Van Eck testified that his typical work day was from 7 a.m. to 5 p.m., and he would generally close the shutters at 5 p.m., except during the summer. He testified that he never took holidays and was able to carry out this system for several years. However, Van Eck's testimony disclosed that his operation of the shutters was far from scientific and was a poor substitute for an automatic control system. It was clear that there were occasions when Van Eck's duties took him away from the riding arena and he could not open the shutters on a regularly scheduled basis or monitor the heat build-up between the shutters and skylight. Van Eck testified that he observed temperatures in the area between the shutters and the skylight rise to the 150 degrees Fahrenheit range on about three occasions. This is significant since this temperature is very close to the maximum service temperature set out in the technical data for acrylic sheets. In my view, it was impossible for one man to properly operate such a complicated shutter system on a 24-hour-a-day basis, 12 months a year.

**II. Was Cyro negligent in the manufacture of its acrylic sheets?**

**150** For the reasons below, I do not find that Cyro was negligent in the manufacture of the acrylic sheets.

**151** Epstein Equestrian alleges that the acrylic sheets were defective and the outer skin of the acrylic sheets was too thick. In this regard, it relies upon the evidence given by Siemens at his examination for discovery and at trial concerning the negative effect of increased thickness on light transmittance, and the fact that testing done by Cyro, as noted above, showed light transmittance values of 53.5% and 50.4%, rather than the 70% value set out in the literature.

**152** However, Siemens also testified that there are tolerable variances in the thickness of the acrylic sheets, and that these are noted in the Cyro documentation. The manufacturing tolerances of $\pm$ 1mm in thickness and [plus or minus] 4mm in width are set out in the technical data. Most importantly, no testing was carried out on any of the acrylic sheets used at the riding arena to determine whether there were unacceptable variances in the thickness of the acrylic sheets. Based on this evidence, I cannot conclude that Siemens's overall evidence suggested that there was an issue with the thickness of the acrylic sheets.

**153** With the exception of light transmittance, the testing that was conducted by Cyro on the piece of acrylic obtained by Siemens at his site visit in November 1998 disclosed that the sample was manufactured within Cyro's standards.

**154** With respect to the issue of light transmittance and Cyro's testing, the piece of acrylic that was tested by Cyro was obtained by Siemens from what he described as a garbage pile outside, behind a barn. The pile also included discarded wood, broken acrylic sheets and other debris. Some of the acrylic sheets were covered with snow. Siemens selected an acrylic sheet from the middle of the pile, broke off a piece and sent it for testing. He testified that if he were to conduct testing to determine light transmittance, it would be important to obtain a proper sample without defects and to conduct three to four tests.

**155** In the circumstances, the test results concerning light transmittance are not persuasive in determining the quality of the acrylic sheets that were manufactured and supplied by Cyro. Certainly, Epstein Equestrian could have tested acrylic sheets that were still located in the Skylight System, newer sheets that it had purchased from Cyro, or Epstein Equestrian could have attempted to obtain new product to test for this litigation. Although Epstein Equestrian had several years to attend to this, it did not have any acrylic sheets tested.

**156** Epstein Equestrian also relied upon the testimony of Professor Kim Pressnail ("Pressnail"), an associate professor in the Department of Civil Engineering at the University of Toronto. He provided an opinion regarding how actual solar transmittance values, that are lower than those published by Cyro, may affect the acrylic sheets. He was qualified to give this evidence. Pressnail concluded that the effect of lower solar transmittance values meant that less energy was transferred through the acrylic sheets, and therefore, more solar heat was absorbed by the acrylic sheets, which would result in an expansion of the acrylic sheets, and this would likely have contributed to the cracking.

**157** In the circumstances of this case, however, I do not accept his evidence that the acrylic sheets were defective and that this caused or contributed to the cracking for the following reasons:

* In his report, he confused the average light transmittance reading of 52% for a solar transmittance reading. While this may not have made a significant difference in the results of his calculations, it underscored his inexperience.
* He based his conclusions on the Cyro testing results concerning light transmittance, which I have concluded were unreliable.
* With respect to his calculations concerning solar heat gain, he incorporated data from Turkewitsch's letter of February 17, 2000. However, Pressnail, again, mistook data for light transmittance as data for solar radiation transmittance.

* In cross-examination, he agreed that if the sample tested by Cyro had been contaminated or changed in any, it would not be a reliable test sample or representative of a proper sample.
* Pressnail did not conduct any independent testing regarding solar transmittance or any other issues.
* This was the first case in which he considered the properties of acrylic sheets.
* His inexperience was demonstrated by his comparison of the acrylic sheets to sealed double-glazed units as opposed to laminated glass, which is the proper type of glass to consider when dealing with skylights. Although he testified that it did not affect his conclusions, it showed his level of inexperience.

**158** It bears repeating that Epstein Equestrian could have had a sample, free of doubt as to its quality, tested in the several years leading up to the litigation. In my view, Epstein Equestrian has not met the onus of proving, on a balance of probabilities, that there was any negligence on the part of Cyro with respect to the manufacture of the acrylic sheets.

## III. Did Cyro make negligent misrepresentations with respect to the quality of its acrylic sheets?

**159** Epstein Equestrian makes a number of allegations that Cyro made negligent misrepresentations, orally and in its literature, with respect to the acrylic sheets. Epstein Equestrian further submits that Cyro made negligent misrepresentations by failing to disclose the light transmittance results in its March 22, 1999 letter containing the rest of the test results for the sample of acrylic that Siemens had obtained at his site visit. For the reasons below, I find that Cyro did not make negligent misrepresentations to Epstein Equestrian.

**160** In order to succeed in a claim for negligent misrepresentation, the five following general requirements must be met: see *Queen v. Cognos Inc.*, *[1993] 1 S.C.R. 87*, at p. 110.

1. A duty of care based on a "special relationship";
2. The representation must be untrue, inaccurate or misleading;
3. The defendant must have acted negligently in making the representation;
4. The plaintiff must have relied, in a reasonable manner, on the representation;
5. The reliance must have been detrimental in that the plaintiff suffered damages as a result of the representation.

**161** I do not accept Cyro's argument that each and every allegation of negligent misrepresentation had to be set out in the pleading. The issue of negligent misrepresentation was set out in a general way. Further, in Pressnail's report and during the lengthy trial, the specific allegations that Epstein Equestrian were relying upon were made clear to Cyro, particularly the alleged claim that Cyro misrepresented the fact that the acrylic is "better than glass".

**162** Based on the definition of "special relationship" as set out in *Hercules Management Ltd. v. Ernst v. Young*, *[1997] 2 S.C.R. 165*, at paras. 24, 43, I find that Cyro owed a duty of care to Epstein Equestrian. Cyro manufactures a specialized product. It is reasonably foreseeable that customers, like Epstein Equestrian, would rely on representations in Cyro's literature and oral representations made by Cyro in order to determine whether the characteristics of Cyro's product are suitable for their purposes, and this reliance by Epstein Equestrian is reasonable in the circumstances of the case. In fact, Cyro did not even bother arguing that it did not meet the requirements for a duty of care as set out in *Hercules Management*.

**163** Cyro argues that a *prima facie* duty of care may be negated by a disclaimer clause. In this regard, Cyro relies upon the decision of Wein J. in *Bank of Montreal v. Witkin* (2005), 9 B.L.R. (4th) 256 (Ont. S.C.), at paras. 72-73, in which it was stated:

> Liability for negligent misrepresentation is dependent on a finding that a *prima facie* duty of care is owed. Such a duty may arise where the parties can be said to be in a relationship of "proximity or neighbourhood", meaning that it can be reasonably foreseen that the other party will rely on the representation and that such reliance, in the particular circumstances of the case, is reasonable.
>
> Even where a *prima facie* duty arises, it can be negated where there has been a disclaimer: disclaimer affects the reasonableness of the reliance. In this case, even if I had found that the Bank's representatives had said or implied something that gave comfort to Mr. Witkin, the clear disclaimer directing him to do his own due diligence would have absolved the Bank of responsibility in this case.

**164** In this case, Cyro submits that it owed no duty of care to Epstein Equestrian by virtue of two disclaimers. First, the warranty section of the Cyro literature provided to Epstein Equestrian included the following Important Notice:

> IMPORTANT NOTICE: The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. **Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.** Nothing herein is to be taken as permission, inducement or recommendation to practice any patented invention without a license. [Emphasis added.]

**165** Second, Cyro included a similar disclaimer in its correspondence. In the correspondence that was forwarded to Clemmensen, the following disclaimer was set out:

> The information is based on data believed to be reliable and is offered in good faith without guarantee, patent warranty or licence. Suitability of our products for a particular purpose must be determined by the user.

**166** Clemmensen looked at the technical data. There is no reason to believe that he was not aware of the notice and that it was commonplace. Turkewitsch confirmed that this type of disclaimer is common in the literature.

**167** The difficulty is, however, that the facts of *Witkin* are entirely distinguishable from the facts of this case. *Witkin* involved allegations that a bank made negligent misrepresentations to Mr. Witkin, a customer of the bank who was acting as a *financial advisor to another customer*, during a meeting between the bank, Mr. Witkin and the bank's customer. In other words, Mr. Witkin was not acting in his capacity as a customer, but was a third party agent. Even if Mr. Witkin was acting as a customer, the court made it clear that the primary relationship between a bank and its customer is contractual. *And even if* a *prima facie* duty of care was owed, the disclaimer by the bank directing Mr. Witkin to do his own due diligence would have negated that duty of care. Importantly, the court went on to state that the bank's reluctance to meet with Mr. Witkin in the first place, its insistence that the customer be present at the meeting, the making of the meeting "without prejudice" and the refusal to provide any specific information, all signified a rejection of a duty of care by the bank.

**168** When the facts of *Witkin* are set out briefly as such, it is clear that that case cannot be analogized to the present case. As stated above, I found that Cyro owed a duty of care to Epstein Equestrian. In my view, the disclaimer clauses upon which Cyro rely does not outright negate a duty of care. As stated in *Witkin*, a disclaimer "affects the **reasonableness of the reliance**" (at para. 73; emphasis added). In this case, Epstein Equestrian reasonably relied on Cyro's knowledge of its own specialized product. Reading literature from Cyro and making inquiries of Cyro is a reasonable way to obtain information about the characteristics of Cyro's product and Epstein Equestrian should be entitled to rely on such representations by Cyro. Since Cyro's acrylic product can be used for

so many different purposes, however, the disclaimers warn the end user to ensure that it is suitable for his or her own particular purposes. As a result, the disclaimer *can* affect the reasonableness of Epstein Equestrian's reliance on certain representations made by Cyro, given the novel application to which the acrylic sheets were being put to in the riding arena.

**169** Therefore, I conclude that in the circumstances of this case, Cyro did owe a duty of care to Epstein Equestrian and this duty of care was not unequivocally ousted by the disclaimer.

**170** I will deal with the following alleged negligent misrepresentations below:

(a) The acrylic product is "better than glass".

(b) Cyro did not disclose the solar transmittance values for angles of incidence of less than 90 degrees.

(c) Cyro delayed disclosing the observations from Siemens's 1997 site visit and Cyro failed to disclose the light transmittance testing results in its letter of March 22, 1999.

(d) Cyro promised 70% light transmittance.

(e) Cyro made certain oral representations at the meeting in December 1993.

**(a) "Better than Glass"**

**171** Epstein Equestrian alleges that the Cyro literature set out that its acrylic product is "better than glass". It specifically refers to Cyro's promotional literature.

**172** A close reading of the literature reveals that Cyro never made such a representation. At best, it promoted its product on the basis that in some ways, it had better features than single-pane glass. Read in context, the Cyro literature clearly states that customers should carry out their own verification and testing to determine the suitability of the acrylic sheets for their own purposes. As noted, this is understandable given the fact that Cyro's acrylic products can be used in a number of different types of installations. In my view, Epstein Equestrian cannot pick out discrete portions from the literature and claim that there was a misrepresentation when the same literature specifically states that the end user should determine the product's suitability for his or her own particular purpose. In fact, in this case, Epstein Equestrian did just that in retaining Kani. Accordingly, it was not reasonable for Epstein Equestrian to rely upon this representation.

**173** If I am wrong, I must consider whether the statement that Cyro acrylic sheets are "better than glass" was a misrepresentation.

**174** Pressnail provided testimony regarding whether the Cyro acrylic sheets were superior in performance as compared to conventional insulated glass units overall and concluded that they were not. In addition to the number of difficulties that I had with Pressnail's evidence, as noted above in para. 157, I also had the following concerns with respect to his evidence on this specific issue:

* His conclusions with respect to the issue of durability, in my view, were speculative in light of the fact that the cause of the significant cracking of the acrylic sheets, as will be discussed further, has not been determined to my satisfaction.

* In coming to his conclusion, he used his own criteria to compare Cyro acrylic sheets to glass, as opposed to using the express representations made by Cyro in its literature. Accordingly, there was a lack of context to his analysis *vis-à-vis* the specific representations made.

**175** Based on the above, I am not satisfied that Epstein Equestrian has established, on a balance of probabilities, that Cyro made a misrepresentation.

**176** Although not specifically raised in its closing arguments, Epstein Equestrian, in its pleadings, raised other alleged misrepresentations dealing with the quality of the acrylic sheets. In my view, these claims must also fail. There was no evidence to support the contention that the acrylic sheets were not "highly rigid" or lacked "good impact resistance" when they were sold as alleged in the Amended Statement of Claim.

**177** Lastly, if I am incorrect, the evidence made it clear that the cost of a skylight was a factor that was considered by Epstein Equestrian, and the Cyro acrylic sheets were the most cost effective. Even if a representation was made that acrylic sheets were better than glass, I am not persuaded, on a balance of probabilities, that this representation led Epstein Equestrian to choose the acrylic sheets.

### (b) Angle of Incidence

**178** Epstein Equestrian alleges that Cyro failed to disclose the solar transmittance values for angles of incidence of less than 90 degrees. Epstein Equestrian submits that this information should have been specifically disclosed.

**179** First, I see no obligation in law for Cyro to disclose this information. Cyro does not publish solar transmittance values for its white acrylic sheets at different angles of incidence as it does for its clear acrylic sheets. Again, Cyro's literature makes it clear that users of its products should conduct its own investigations to determine whether the acrylic sheets would be suitable for any particular application.

**180** In any event, even if Cyro was negligent in failing to disclose this information, the simple fact of the matter is that Kani took into account the sun's angle of incidence in his modelling with the Enerpass program. The fact that solar heat gain is dependent on the angle of incidence was well known to Kani; therefore, this was known to Clemmensen and ought to have been known by Epstein.

**181** Based on the above, I find that Cyro did not make any misrepresentation that was untrue, inaccurate or misleading, nor did Epstein Equestrian rely upon the misrepresentation, and as will be discussed further, I cannot conclude that Epstein Equestrian suffered damages as a result of the alleged misrepresentation.

### (c) Non-Disclosure

**182** Epstein Equestrian raises two issues with respect to the non-disclosure issue:

(1) Cyro delayed disclosing its observations from Siemens's 1997 site inspection; and

(2) Cyro misled Epstein Equestrian by not disclosing the results of the light transmittance testing that was conducted by the Cyro laboratory in Orange, Connecticut.

**183** With respect to the first allegation, I do not accept that Siemens ever had a duty to report to Epstein Equestrian. Further, I do not find that he made a misrepresentation in the purported delay. I accept Siemens's evidence that he did agree to provide further information if required, but in his view, no follow-up was necessary. He, ultimately, did report to Epstein Equestrian after the 1998 attendance in his report dated March 22, 1999. On all of the circumstances, even if Siemens did have a duty, I do not find that he made a misrepresentation by delaying the disclosure of his observations from the 1997 site inspection.

**184** However, I do find that Cyro ought to have disclosed the results of the light transmittance testing, even though I have concluded that Siemens honestly held the view that the light transmittance results were unimportant since it was not being discussed as a cause of the cracking, the testing was inadequate and the sample tested was not ideal. In my view, since the cause of the cracking remained unknown, all potential causes should have been explored and Siemens should have disclosed the testing results concerning light transmittance so that further investigation could be carried out. Turkewitsch testified that in the course of his investigation, it would have been

important to have the light transmittance information, even though he also testified that light transmittance was not being explored as a cause of the cracking at the time.

**185** In the circumstances, the light transmittance results should have been disclosed and Siemens ought not to have advised Clemmensen in his March 22, 1999 letter that the sheet was within manufacturing standards without providing some explanation as to why the light transmittance testing did not change this conclusion.

**186** As I will discuss further, I cannot find, however, that Epstein Equestrian suffered damages as a result of the misrepresentation. The shortcomings in Siemens's disclosure became known to Epstein Equestrian several years ago, and as I have noted, Epstein Equestrian has not provided the court with any evidence to establish that, on a balance of probabilities, the lack of light transmittance caused or contributed to the vertical or horizontal cracking.

### (d) Light Transmittance

**187** The light transmittance testing done by Cyro came up with an average of 52% transmittance, which falls short of the advertised light transmittance of 70%.

**188** As I have previously discussed in some detail, I cannot conclude that the Cyro test results are valid and represent the true light transmittance of the acrylic sheets manufactured and supplied by Cyro for the riding arena. It bears repeating that Epstein Equestrian, who bears the burden of proof to establish any deficiencies, did not conduct any testing that it could submit to the court to establish deficiencies with respect to the light transmittance of the Cyro acrylic sheets.

**189** No parties in this matter took the position that the provisions of the *Sale of Goods Act*, *R.S.O. 1990, c. S.1*, applied in this case.

### (e) The December 1993 Meeting

**190** I do not find that there were oral negligent misrepresentations made by Cyro to Epstein Equestrian. At the meeting in December 1993, Epstein was specifically warned by both Siemens and Jonkman about the risks of constructing a riding arena that would only be heated by solar energy. Siemens stated that he did not think it was possible north of the Mason-Dixon line, while Jonkman expressed concerns that snow did not melt off roofs very fast and that one could not rely upon solar heat exclusively to heat the riding arena. Given that I have found that Epstein's recollection of what was said at the meeting was unreliable, I accept the evidence of Jonkman and Siemens as to what occurred that day. Lastly, I accept Siemens's evidence that there was no discussion with Epstein about the white acrylic sheets; therefore, no misrepresentations could have been made about the acrylic sheets that were actually used in the riding area. In the circumstances, there is no evidence to suggest that negligent misrepresentations were made by Siemens or Jonkman, and there is no evidence of detrimental reliance by Epstein Equestrian.

## IV. Is there an issue of spoliation with respect to Cyro destroying relevant documents and the acrylic sheets that it tested?

**191** The law with respect to the issue of spoliation was succinctly set out by Himel J. in *Dickson v. Broan-NuTone Canada Inc.*, *[2007] O.J. No. 5114* (S.C.), at paras. 38-40, 44, wherein she stated:

> The case most frequently referred to on the issue of spoliation of evidence remains a 1896 decision of the Supreme Court of Canada: *St. Louis v. The Queen* (1896) 25 S.C.R. 649. In that case, Taschereau J. explained the spoliation inference as follows:
>
> > "... the destruction of evidence carries a presumption that the evidence destroyed would have been unfavourable to the party who destroyed it, but that presumption may be rebutted."
>
> The Supreme Court has not provided any further guidance on this issue since that time. However, case law in Ontario indicates that the inference has continued to be applied as a rule of evidence. In *Spasic Estate v. Imperial Tobacco Ltd.*, [2000] O.J. No. 2690 (C.A.; leave to appeal to the Supreme Court of Canada not granted), the Ontario Court of Appeal stated that the doctrine was indeed a rule of evidence, as opposed to an independent tort. The court held that the adverse inference drawn against the litigant who destroyed a piece of evidence provided an adequate remedy for spoliation: see paragraphs 10-11.
>
> The Court of Appeal in Spasic referred to a decision of the Divisional Court, *Rintoul v. St. Joseph's Health Centre*, [1998] O.J. No. 4074 (Div. Ct.), which stated that "the foreseeable trend is to view 'spoliation' as an evidentiary rule that raises a presumption, and not as a stand-alone independent tort." This approach has been followed in *Cheung v. Toyota Canada Inc.* [2003] O.J. No. 411 (Sup. Ct. Jus.), *Drouillard v. Cogeco Cable Inc.,* [2005] O.J. No. 3166 (Sup. Ct. Jus.), and *Carrel v. Randy Laur Burner Service*, [2004] O.J. No. 70, 2004 CarswellOnt 66 (Sup. Ct. Jus.).
>
> ...
>
> However, I find that the Ontario case law has made it clear that spoliation is an evidentiary principle, one that results in an adverse inference if not rebutted.

**192** Epstein Equestrian submits that the manufacturing records, the files of Cyro executive, Mitch Bowyer, as well as the testing results and samples tested were destroyed by Cyro. As a result, Epstein Equestrian requests that I draw the presumption that the records would have hurt Cyro's position in the lawsuit: see *Blais v. Toronto Area Transit Operating Authority*, 2011 ONSC 1880, 105 O.R. (3d) 575; and *Dickson*.

**193** I am not prepared to find that Cyro destroyed evidence. Even if it did, I am satisfied that Cyro has rebutted the presumption that the records would have hurt Cyro's position in the lawsuit.

**194** It cannot be ignored that this action has meandered along for several years before reaching trial. The riding arena was constructed in 1994. The claim was commenced by way of a notice of action in September 2000 and discoveries did not proceed until 2004. Thereafter, it took approximately eight years to bring this matter to trial. I accept Siemens's evidence that the Cyro document retention policy is seven years, so it is not surprising that some documentation could have been destroyed over time.

**195** Furthermore, within the reams of documentation produced by Cyro, both helpful and unhelpful documentation exists with respect to its position in this lawsuit, specifically on the issue of light transmittance. Finally, there was no evidence adduced at trial to suggest that any of the alleged documentation was of any particular import to the issues in the lawsuit.

**196** With respect to the acrylic sheets that were tested by Cyro, there was no evidence adduced to suggest when or how the acrylic sheets were disposed of, and in any event, as noted on a number of occasions, Epstein Equestrian, to this day, retains acrylic sheets that could easily have been tested and the results used as evidence at trial.

**V. Was Clemmensen negligent?**

**197** The Defendants allege that Clemmensen was negligent with respect to his coordination of the project, essentially making the following submissions:

(a) He failed to properly coordinate the various consultants and to ensure sufficient information exchange occurred between them, particularly JBA, Grant, Kani, Cyro and Frank Jonkman and Sons.

(b) He failed to retain an architect or engineer with solar energy experience.

(c) He did not have the requisite experience and expertise to participate in the design of the riding arena.

(d) He failed to properly read the Cyro literature and understand the values and precautions in the document.

(e) He failed to test the acrylic product, as recommended by the manufacturer.

**198** I do not find that Clemmensen was negligent. Once again, the design of a naturally heated riding arena was a novel idea in Canada. Accordingly, Clemmensen, along with all of the other consultants on the project, faced unique challenges in trying to implement Epstein's stated goals. It is somewhat ironic that the Defendants rely on this fact in their defence, but seek to obtain a finding of negligence against Clemmensen for his failure to anticipate certain problems.

**199** While Clemmensen took on the responsibilities of a consultant, a project manager and a construction manager with respect to a project for which he had limited expertise, he was really in no different a position than any of the other consultants who acted on the project. They were all trying to bring a novel concept to life in difficult circumstances. Given his educational and work background, I cannot conclude that he lacked the necessary expertise to perform his duties, nor did he fail to properly coordinate the various consultants and trades. Although his efforts were, arguably, far from perfect, I certainly cannot find fault in this regard or conclude that he fell below the reasonable standard of care.

**200** I also accept Clemmensen's evidence that he acted as Epstein's agent, and ultimately, all decisions of any significance were made by Epstein. Clemmensen was hired by Epstein to pass the information that he received along to Epstein, to consult with Epstein and to carry out Epstein's instructions. I accept Clemmensen's evidence that this marked the level of his decision-making. The best example of this can be seen in Clemmensen's initial approval, in principle, of the installation of an automatic controller in October 1995 that was thereafter vetoed by Epstein. In my view, Clemmensen acted reasonably in coordinating the project, and the complaints that the Defendants make relate to decisions made by Epstein, which were carried out by Clemmensen.

**VI. Was Kani negligent?**

**201** The Defendants make a number of allegations against Kani, which are set out below:

(a) He provided modelling results based on a roof slope of 37 degrees when the roof slope was actually 30 degrees.

(b) He assumed a 15% reduction in solar heat gain for framing without actual data.

(c) He used Toronto weather modelling as opposed to King City weather modelling.

(d) He made assumptions that the north Skylight System could add solar heat gain without reasonable proof.

(e) He advised Clemmensen that his modelling was accurate without actually knowing this was the case.

(f) He failed to make reasonable recommendations on the design of the riding arena, particularly with respect to configuration, orientation, material selection and the Skylight System slope angle.

**202** There were some problems with the modelling done by Kani. In the circumstances, however, I cannot

conclude that he was negligent in his modelling. Much like Frank Jonkman and Sons, Cyro and Clemmensen, he was dealing with a novel concept. In fact, the documents disclose that Kani complained to Clemmensen that he was having difficulty understanding the performance goals that Epstein wanted to achieve. I am satisfied that while the modelling was not perfect, it was reasonable, given the number of variables he was expected to take into account and the lack of clear instructions. Less than exact results were not surprising.

**203** Furthermore, Kani was not asked, nor did he become actively involved in the actual design of the riding arena. He did make a number of recommendations primarily with respect to supplementary heat and humidity. However, it does not appear as though any of his recommendations were followed. In fact, Epstein's testimony strongly suggests that he was not interested in Kani's recommendations and this is certainly reflected, as noted above, in Kani's complaints that he was having difficulty understanding what Epstein wanted to achieve. Kani's involvement in the project essentially ended in March 1995.

**204** In the circumstances, the Defendants have failed to establish that, on a balance of probabilities, Kani was negligent with respect to the modelling that he did for Epstein Equestrian. Further, no expert evidence was adduced regarding the effect of Kani's calculations for the purpose of establishing that Kani, if negligent, caused damages to Epstein Equestrian.

## VII. Did Epstein Equestrian breach its Contact with Frank Jonkman and Sons and/or was it contributorily negligent?

### Refusal of Epstein Equestrian to pay the entire amount of the Contract

**205** Frank Jonkman and Sons submits that Epstein Equestrian's failure to pay the remaining $2,991.92 that was owed pursuant to the Contract when the Notice of Substantial Performance was issued constituted a substantial breach of the Contract. Frank Jonkman and Sons further submits that since there was no evidence that the non-payment was for the purpose of correcting deficiencies or incomplete work, there were reasonable grounds for Frank Jonkman and Sons to terminate the Contract. For the reasons set out below, I disagree.

**206** The law is clear that, generally, upon substantial completion of a contract, the contractor is entitled to be paid the full amount of the contract: see e.g. *729806 Ontario Ltd. (c.o.b. Tri-Star) v. 796105 Ontario Ltd.*, [1994] O.J. No. 1436, at para. 73. Often, a failure to pay is considered a fundamental breach, allowing the contractor to treat the contract as repudiated: see e.g. *Vallie Construction Inc. v. Minaker*, 2011 ONSC 6565, [2012] O.J. No. 2906, at para. 147.

**207** However, these propositions of law cannot be removed from context. There is no argument that where a large part of a contract has not been paid upon substantial completion without good reason, the innocent party is generally able to treat the contract as repudiated because it constitutes a fundamental breach. A fundamental breach is a breach that goes to the root of the contract and substantially deprives the first party of what he or she bargained for: see CED (Ont. 4th), vol. 13, title 35 at s. 859. On the other hand, "[a] right to terminate a contract does not arise simply because the other party is in breach. In fact, such an assertion is incongruous because it is upon the continuation of the contract that the remedy for breach usually depends": see *Lee v. Occo Developments Ltd.* (1994), 148 N.B.R. (2d) 321 (Q.B.), at para. 82. A breach of contract generally gives rise to the right to sue the party who breached the contract for damages: see *Lee*, at para. 83.

**208** The final value of the Contract was $165,948.44 and Epstein Equestrian failed to pay $2,991.92. This is less than 2% of the entire Contract. Clearly, this failure to pay does not *substantially* deprive Frank Jonkman and Sons of what it bargained for. Put another way, if Frank Jonkman and Sons's argument was accepted, it would be entitled

to treat the Contract as repudiated even if Epstein Equestrian failed to pay $10 of the Contract. It is clear that this result is unreasonable and does not accord with the basic principles of contract law.

**209** As a result, even if Epstein Equestrian breached the Contract by improperly failing to pay the $2,991.92, Frank Jonkman and Sons was not entitled to treat the Contract as repudiated. Frank Jonkman and Sons was required to complete the Contract and sue for the $2,991.92.

**Breach of Contract and/or contributory negligence concerning the construction of the Skylight System**

Breach of Contract

**210** Frank Jonkman and Sons alleges that Epstein Equestrian breached the Contract by refusing to install an automatic controller, as specified in the Contract.

**211** Section 12517 of the Contract provided, in part, as follows:

* Frank Jonkman and Sons would provide an integrated, two-part, motorized, operable, insulated, self-sealing Skylight System automatically controlled by a central control unit with sensors to control interior ambient temperatures in the riding arena by opening to let in sunlight for heat and closing to contain heat. Optionally, the system may also open to extradite heat on summer evenings (see part 1, para. 1.2.1).
* The system would reduce air travel through edges due to stack effect, so as to control the formation of condensation on the underside of the skylight to eliminate condensate dripping into the interior of the riding arena (see part 1, para. 1.2.3).
* After dawn, the controller would open the shutters when a certain adjustable sunlight intensity was reached and close the system when the sunlight intensity falls below that point again (see part 1, para. 1.2.3).
* Sensors to detect light intensity, solar radiation and air temperature would be mounted in various locations in the riding arena and outside on the roof (see part 2, para. 2.1.18).
* Two Caloristats would be installed with adjustable dawn and dusk sensor controls, adjustable energy intensity upper limit controls, amongst other features (see part 2, para. 2.1.19).
* An alternative automatic controller could be obtained by Epstein Equestrian (see part 1, para. 1.2.4).

**212** The evidence of Turkewitsch is important on this issue. He was an impressive witness who had no axe to grind in the litigation as he had worked for both Frank Jonkman and Sons and Epstein Equestrian. He also had obvious expertise in the area, both by way of education and work experience. His evidence on the functionality of an automatic controller was uncontradicted.

**213** From the beginning of his involvement Turkewitsch, along with Jonkman, strongly urged Epstein Equestrian to install an automatic controller, starting with the Caloristat. When Epstein made it clear that he did not want the Caloristat, Turkewitsch suggested installing one of the alternative products, the Argus controller or the LCC 90. Epstein continually refused to have any of the proposed automatic controllers installed. He was particularly critical of the Caloristat, which he described as a simple control system that would have destroyed the acrylic sheets. Thereafter, he refused to have any of the other alternatives installed as he believed that the proposed automatic controllers would negatively impact his ability to obtain solar heat gain. In correspondence (such as Turkewitsch's letter of October 28, 1994) and verbally, Jonkman and Turkewitsch made it clear to Epstein that the Caloristat would allow the Skylight System to operate properly - the shutters would open and close depending on sunlight intensity and other programmable settings in order to control the solar heat gain and heat retention. In the aforementioned correspondence, Turkewitsch specifically dealt with the issue of heat build-up between the skylight

and the shutters. He also provided a comprehensive opening and closing schedule. He went so far as to propose the Enhanced Control Package to coordinate the Skylight System, the Dust Control System and the cupola louvre controls to ensure maximum performance, which was outside the scope of Frank Jonkman and Sons's contracted obligations.

**214** Notwithstanding this offer and the fact that Epstein had no expert evidence to the contrary, he unreasonably refused to have an automatic controller installed. At this point in time, it should have been obvious to Epstein, based on the modelling being done by Kani and the entirety of the literature that was provided to him by Cyro, that he was not going to obtain the solar heat gain he initially thought was possible by virtue of his review of one piece of Cyro literature. It was also clear that problems with lack of heat, humidity and ventilation existed within the riding arena.

**215** In the few years that followed this correspondence, the most significant damage started to occur to the riding arena. Although the cause of the horizontal cracking was debated, I accept Turkewitsch's and Jonkman's evidence that the heat build-up between the shutters and acrylic sheets could have been identified and alleviated by the installation of the Caloristat or one of the alternate controllers that were offered. As noted, the Argus controller, which was first recommended by Turkewitsch in the fall of 1994, had advantages over the Caloristat because it could easily be reconfigured at a later date, it could measure humidity and it could coordinate the Skylight System with the cupola louvre controls and the Dust Control System. According to Turkewitsch, the Argus controller also could have been programmed with additional alarms and had "more bells and whistles". I accept Jonkman's and Turkewitsch's evidence that the automatic controller was like the engine of a car and was absolutely required. All of this information concerning function was repeatedly relayed to Clemmensen and Epstein.

**216** I also accept Turkewitsch's evidence that the LCC 90 would have prevented the overheating of the air space between the shutters and the skylight, and it would have reduced, and probably eliminated, the condensation and the resultant staining of the wooden timbers in the riding arena. All of this information was made known to Epstein in Turkewitsch's September 29, 1995 letter.

**217** In Turkewitsch's letter of September 29, 1995, Frank Jonkman and Sons offered Epstein the LCC 90 on the basis that if Epstein was unhappy with it, a full credit would be provided. It gave Epstein Equestrian the opportunity to have the LCC 90 installed without any financial risk, or for that matter, risk to the riding arena. The letter made it clear that the installation of the LCC 90 was strongly recommended by Turkewitsch and that it had greater capabilities than the Caloristat. These capabilities included the collection of information, such as temperature and humidity. Clemmensen thought this was a good idea and was ready to provide a conditional acceptance. Epstein vetoed the LCC 90 installation.

**218** Epstein's response to the September 29, 1995 letter is especially perplexing. Instead of agreeing to the installation of an automatic controller at no risk, Epstein chose to have Van Eck continue to manually open and close the shutters. This was a very poor substitute for an automatic control system. As noted, I accept that an automatic control system would have been far more effective than Van Eck, notwithstanding his best efforts. There is little doubt in my mind that the manual operation by Van Eck was less than satisfactory and allowed, at least on a few occasions, an unacceptably high build-up of heat between the shutters and the skylight.

**219** During this period of time, while Epstein stubbornly and unreasonably continued to refuse to have an automatic controller installed, the condensation, humidity and heat build-up between the shutters and the skylight escalated out of control. The very purpose of the automatic controller was to prevent this type of damage from occurring and Turkewitsch believed that it would have done so. For approximately five years, Turkewitsch continued to recommend that an automatic controller be installed to no avail.

**220** In analyzing Epstein Equestrian's alleged breach of the Contract, the succinct statement made by G.H.L. Fridman, *The Law of Contract in Canada*, 5th ed. (Toronto: Thomson Canada Limited, 2006), at p. 550, is instructive:

> [A] party who seeks to recover from the party who has not performed must show that he, the plaintiff, was always ready, willing and able to perform his concurrent obligation, in a situation in which the mutual obligations are concurrent rather than anterior and posterior. [Footnotes omitted.]

**221** This principle was applied in *Wiebe (c.o.b. Allside Exteriors and Renovations) v. Braun*, *2011 MBQB 157*, *265 Man. R. (2d) 261*. In that case, the owners of a home told their home renovator it was no longer permitted to come back to their home to complete its contract when the owners disagreed with the way the renovator was proceeding. The court found that the owners committed a fundamental breach of the contract as the home renovator was always ready, willing and able to complete the contract. The court also made the following statement, at para. 14: "With every contract there are implied terms. In the context of a construction contract, one such implied term is that an owner will not take steps to prevent or hinder a contractor from performing his work."

**222** As in *Wiebe*, Frank Jonkman and Sons was always ready, willing and able to install an automatic controller of Epstein Equestrian's choice pursuant to the Contract. As a result, Epstein Equestrian committed a fundamental breach of the Contract by failing to allow Frank Jonkman and Sons to install one of the controllers it had suggested and to complete the Contract.

**Negligence**

**223** I now turn to the alleged contributory negligence of Epstein Equestrian. I am satisfied that I may find concurrent liability in breach of contract and tort. This view is supported by the Supreme Court of Canada in *BG Checo International Ltd. v. British Columbia Hydro and Power Authority*, *[1993] 1 S.C.R. 12*, at p. 37:

> We conclude that neither principle, the authorities nor the needs of contracting parties support the conclusion that dealing with a matter by an express contract term will, in itself, categorically exclude the right to sue in tort. The parties may by their contract limit the duty one owes to the other or waive the right to sue in tort. But subject to this, the right to sue concurrently in tort and contract remains.

**224** Concurrent liability is also provided for in s. 3 of the *Negligence Act*.

**225** A finding of contributory negligence requires a conclusion that the plaintiff did not take all reasonable steps to avoid or mitigate a foreseeable risk or harm: *Grand Restaurants of Canada Ltd. v. City of Toronto* *(1981), 32 O.R. (2d) 757* (H.C.), at p. 774.

**226** The Defendants make several claims of contributory negligence against Epstein Equestrian:

(a) It designed a roof slope that was not consistent with solar heating of the riding arena.

(b) It relied on Cyro literature without doing its own testing.

(c) It failed to retain and/or consult with an engineer or architect with solar experience.

(d) It failed to complete its Contract with Frank Jonkman and Sons and install an automatic controller.

(e) It failed to record temperature and humidity data in the riding arena.

(f) It failed to add supplementary heat to the riding arena.

(g) It declined to follow the recommendations of additional experts retained to investigate issues of humidity and ventilation - namely, Conserval, Buchan and Brook.

(h) It failed to follow the recommendations of its own consultants, Kani, Grant and Frank Jonkman and Sons.

(i) It failed to check and remove dead insects from the acrylic sheets and add a tracer cable on the north side.

**227** With respect to allegations (a) - (c), I cannot conclude that Epstein, acting on behalf of Epstein Equestrian, was negligent. He, too, was dealing with a novel concept and the fact that the roof slope may not have been sufficient for solar heating, that his own testing of the Cyro acrylic product may have led to different results or that an engineer/architect with solar experience may have been of assistance, can be debated.

**228** My reasons concerning (d) have been canvassed above. I find that Epstein Equestrian was contributorily negligent for failing to install the automatic controller.

**229** With respect to allegations (e) - (h), I find that Epstein Equestrian was negligent for its failure to follow the recommendations of the experts in the field - namely Kani, Grant, Frank Jonkman and Sons, Conserval, Buchan and Brook - to introduce supplementary heat and add a ventilation system, which would have improved the condensation and humidity conditions in the equestrian facility.

**230** As early as 1993, Epstein was being told by Kani, and later by all of the aforementioned experts, up until 2004, that these issues had to be dealt with, particularly the issue of supplementary heat that Kani noted could be done at a very minimal cost. Epstein, in an unrealistic attempt to realize his dream of a naturally heated equestrian facility, continued to ignore these recommendations. In doing so, he acted in an unreasonable fashion and was contributorily negligent.

**231** Even before the Skylight System was even installed, the equestrian facility, and in particular, the riding arena, was experiencing problems concerning humidity, ventilation and temperature. Epstein was advised by his consultants and experts that steps had to be taken to get these problems under control subsequent to the installation of the Skylight System. I am particularly struck by the findings in the Buchan report of December 1997, which stated that there were high levels of carbon dioxide, ventilation problems and high humidity. These problems formed an ideal breeding ground for moulds, bacteria and fungi. Furthermore, the ventilation strategies in each part of the equestrian facility were significantly different and not necessarily complementary. This exacerbated the health problems already associated with the equestrian facility. In light of the fact that Epstein conceded that ventilation and humidity issues were not Frank Jonkman and Sons's responsibility under the Contract, and they could not be said to be the responsibility of Cyro, Epstein Equestrian was negligent in its failure to follow the advice of its consultants and experts.

**232** To be clear, I do not find that Epstein Equestrian's failure to add supplementary heat and install a ventilation system to assist with the issues of humidity and condensation was a breach of the Contract with Frank Jonkman and Sons. Responsibility for supplementary heat and ventilation was not expressly assigned in the Contract. The Contract was for a mechanically functioning Skylight System and did not generally cover the conditions inside the riding arena. As a result, although I am finding that Epstein Equestrian was negligent in failing to add supplementary heat and a ventilation system, I am not satisfied that Epstein Equestrian breached the Contract in this regard.

**233** Lastly, with respect to (i), Turkewitsch testified that the most likely cause of the vertical cracking was the build-up of condensation and its subsequent freezing in the acrylic sheets that was exacerbated by blocked drainage channels located at the bottom of the sheets, which were likely blocked by dead insects. He also noted that there were problems with ice dams building on the bottom of the acrylic sheets, particularly on the north side. He recommended that the sheets be inspected periodically, kept free of insects and that a heat tracer cable be installed on the north side to avoid the formation of ice dams.

**234** As noted, I have already concluded that Epstein Equestrian breached the Contract and/or was negligent in its failure to install an automatic controller as it would have assisted, if not eliminated, problems with condensation. The evidence does not, however, support the conclusion that Epstein Equestrian was negligent for failing to inspect and remove dead insects. This was being done by Van Eck. I do conclude that Epstein Equestrian was negligent for failing to install a heat tracer cable as recommended by Turkewitsch. That would have been reasonable in the circumstances.

**VIII. Causation**

**235** For the reasons below, I find that Epstein Equestrian has failed to establish, on a balance of probabilities, that Frank Jonkman and Sons and/or Cyro caused or contributed to Epstein Equestrian's damages by way of an actionable act or omission. Similarly, I find that Cyro has failed to establish, on a balance of probabilities, that the non-parties, Clemmensen and/or Kani, contributed to Epstein Equestrian's damages by way of an actionable act or omission.

**The Law**

**236** It is instructive to review the case law in this area. In the case of *Snell v. Ferrell*, *[1990] 2 S.C.R. 311*, at pp. 326, 328-330, the Supreme Court of Canada set out the following principles with respect to causation:

> Causation is an expression of the relationship that must be found to exist between the tortious act of the wrongdoer and the injury to the victim in order to justify compensation of the latter out of the pocket of the former.
>
> ...
>
> I am of the opinion that the dissatisfaction with the traditional approach to causation stems to a large extent from its too rigid application by the courts in many cases. Causation need not be determined by scientific precision. It is, as stated by Lord Salmon in *Alphacell Ltd. v. Woodward*, [1972] 2 All E.R. 475, at p. 490:
>
> > ... essentially a practical question of fact which can best be answered by ordinary common sense rather than abstract metaphysical theory.
>
> Furthermore, as I observed earlier, the allocation of the burden of proof is not immutable. Both the burden and the standard of proof are flexible concepts. In *Blatch v. Archer* (1774), 1 Cowp. 63, 98 E.R. 969, Lord Mansfield stated at p. 970:
>
> > It is certainly a maxim that all evidence is to be weighed according to the proof which it was in the power of one side to have produced, and in the power of the other to have contradicted.
>
> ...
>
> These references speak of the shifting of the secondary or evidential burden of proof or the burden of adducing evidence. I find it preferable to explain the process without using the term secondary or evidential burden. It is not strictly accurate to speak of the burden shifting to the defendant when what is meant is that evidence adduced by the plaintiff may result in an inference being drawn adverse to the defendant. Whether an inference is or is not drawn is a matter of weighing evidence. The defendant runs the risk of an adverse inference in the absence of evidence to the contrary. This is sometimes referred to as imposing on the defendant a provisional or tactical burden. In my opinion, this is not a true burden of proof, and use of an additional label to describe what is an ordinary step in the fact-finding process is unwarranted.
>
> The legal or ultimate burden remains with the plaintiff, but in the absence of evidence to the contrary adduced by the defendant, an inference of causation may be drawn although positive or scientific proof of causation has not been adduced. If some evidence to the contrary is adduced by the defendant, the trial judge is entitled to take account of Lord Mansfield's famous precept. This is, I believe, what Lord Bridge had in mind in *Wilsher* when he referred to a "robust and pragmatic approach to the ... facts" (p. 569). [Citation omitted.]

**237** With respect to the approach a court should take in addressing causation, the Court of Appeal for Ontario in *Aristorenas v. Comcare Health Services* *(2006), 83 O.R. (3d) 282* (C.A.), at para. 54, stated as follows:

> The "robust and pragmatic" approach is not a distinct test for causation but rather an approach to the analysis of the evidence said to demonstrate the necessary causal connection between the conduct and the injury. Importantly, **a robust and pragmatic approach must be applied to evidence; it is not a substitute for evidence** to show that the defendant's negligent conduct caused the injury. [Emphasis added.]

**238** It is also important to recognize that the "but for" test is the primary test for causation. The Supreme Court of Canada in *Resurfice Corp. v. Hanke*, *2007 SCC 7*, *[2007] 1 S.C.R. 333*, at paras. 21-23, held as follows:

> First, the basic test for determining causation remains the "but for" test. This applies to multi-cause injuries. The plaintiff bears the burden of showing that "but for" the negligent act or omission of each defendant, the injury would not have occurred. Having done this, contributory negligence may be apportioned, as permitted by statute.
>
> This fundamental rule has never been displaced and remains the primary test for causation in negligence actions. As stated in *Athey v. Leonati*, *[1996] 3 S.C.R. 458*, at para. 14, *per* Major J., "[t]he general, but not conclusive, test for causation is the 'but for' test, which requires the plaintiff to show that the injury would not have occurred but for the negligence of the defendant". Similarly, as I noted in *Blackwater v. Plint*, *[2005] 3 S.C.R. 3*, at para. 78, "[t]he rules of causation consider generally whether 'but for' the defendant's acts, the plaintiff's damages would have been incurred on a balance of probabilities."
>
> The "but for" test recognizes that compensation for negligent conduct should only be made "where a substantial connection between the injury and the defendant's conduct" is present. It ensures that a defendant will not be held liable for the plaintiff's injuries where they "may very well be due to factors unconnected to the defendant and not the fault of anyone": *Snell v. Farrell*, at p. 327, *per* Sopinka J.

**239** Finally, it must be remembered that scientific proof of causation is not required and a lack thereof is not a reason to stray from the "but for" test. The court should not place undue emphasis on expert evidence as the court is required to take a common sense approach. As stated by the Supreme Court of Canada in *Clements v. Clements*, *2012 SCC 32*, *[2012] 2 S.C.R. 181*, at para. 38:

> In many cases of causal uncertainty, it is conceivable that with better scientific evidence, causation could be clarified. Scientific uncertainty was referred to in *Resurfice* in the course of explaining the difficulties that have arisen in the cases. However, this should not be read as ousting the "but for" test for causation in negligence actions. The law of negligence has never required scientific proof of causation; to repeat yet again, common sense inferences from the facts may suffice. If scientific evidence of causation is not required, as *Snell* makes plain, it is difficult to see how its absence can be raised as a basis for ousting the usual "but for" test.

**240** In my view, the "but for" test is the appropriate test in this case. None of the parties made submissions to the contrary. To be precise, I do not find that this case falls into the small percentage of cases in which special circumstances exist that make the "but for" test unworkable and necessitate the application of the material contribution test.

**Analysis Re: Frank Jonkman and Sons, Cyro, Kani and Clemmensen**

**241** In taking a robust and pragmatic, as well as a common sense approach to the evidence, I do not find that but for the actions of Frank Jonkman and Sons, Cyro, Clemmensen and/or Kani, Epstein Equestrian's damages would not have occurred. I do not find a substantial connection between the failure of the Skylight System and the conduct or activities of Frank Jonkman and Sons, Cyro, Clemmensen and/or Kani.

**242** Epstein Equestrian bears the burden of proof to establish, on a balance of probabilities, that Frank Jonkman and Sons and/or Cyro caused or contributed to its damages. In my view, it failed to discharge this burden.

**243** Similarly, Cyro has failed to establish, on a balance of probabilities, that Clemmensen and/or Kani caused or contributed to the damages sustained by Epstein Equestrian.

**244** Siemens and Turkewitsch both testified that the most likely cause of the significant horizontal cracking was the build-up of heat between the shutters and the skylight. They further testified that the cause of the heat build-up could not be determined. Given their expertise and involvement, I accept their evidence.

**245** I agree with the submissions of counsel for the Defendants that the evidence indicates that the heat build-up may have been caused by a number of factors, including the following:

* Lack of adequate ventilation in the riding arena.
* Lack of a supplementary heating system in the riding arena.
* Use of incompatible materials.
* Failure of Frank Jonkman and Sons to properly operate the shutters during construction.
* Failure of Van Eck to properly operate the shutters.
* Defective manufacture of the Cyro acrylic product.

**246** The only party to retain an expert pursuant to the *Rules of Civil Procedure*, *R.R.O. 1990, Reg. 194*, was Epstein Equestrian. It retained Pressnail. I did not find his evidence to be persuasive for the reasons set out in my above analysis of Cyro's alleged negligence. However, Pressnail did agree that if the acrylic sheet used for testing had been found in a pile of debris, the results may not be representative of a new piece of acrylic manufactured by Cyro. Furthermore, Pressnail conceded that there were several potential causes of the cracking in the Cyro acrylic sheets.

**247** Ultimately, I find that no one has been able to come up with a probable cause of the heat build-up, and thus, the failure of the Skylight System. In my view, this is largely due to the fact that Epstein Equestrian did not properly record, over a long period of time, the temperature and humidity data, which would have allowed a proper assessment of the heat build-up, nor did it allow for the installation of an automatic controller that could have collected the same type of data and provided critical information concerning heat build-up and humidity.

**248** This lack of data, as well as the fact that there was no evidence that any acrylic sheets other than the one obtained by Siemens was tested, leaves me in no position to determine the cause of the failure on a balance of probabilities.

**249** The fact that cause cannot be determined is not surprising given the multiple problems with the equestrian facility and riding arena concerning heat, ventilation, condensation and humidity.

**250** With respect to the vertical cracking, there is insufficient evidence to suggest that Frank Jonkman and Sons, Cyro, Clemmensen and/or Kani caused this damage. Certainly, they cannot be responsible for the issues stemming from the lack of maintenance (*i.e.* cleaning out dead insects and the failure to install a heat tracer cable), which leaves only the issue of condensation. Given the problems within the riding arena, I cannot conclude that problems with condensation arose from the actions, or lack thereof, of the Defendants, Clemmensen and/or Kani. Once again, the condensation problems could have been caused by a number of factors.

**251** Lastly, for the sake of clarity, I did consider the issue of Cyro's non-disclosure of the light transmittance testing. As noted, I do not find that the Cyro test results with respect to the issue of light transmittance are valid. Further, based on the evidence, I do not find that the non-disclosure, in and of itself, caused Epstein Equestrian any damages.

**252** Accordingly, Epstein Equestrian's claims against the Defendants and Cyro's claims against Clemmensen and Kani must fail.

**Analysis Re: Epstein Equestrian**

**253** Notwithstanding the fact that the cause of the heat build-up between the shutters and the acrylic sheets has never been established, I am satisfied that the Defendants have proven, on a balance of probabilities, that the failure of Epstein Equestrian to install an automatic controller caused the horizontal cracking of the acrylic sheets and contributed to the vertical cracking of the acrylic sheets.

**254** With respect to the horizontal cracking, I accepted Turkewitsch's evidence that the build-up of heat between the skylight and the shutters could have been prevented by the installation of an automatic controller. Based on all the evidence, including the testimony of Turkewitsch, Jonkman and Siemens, I find that if there had not been a build-up of heat, the horizontal cracking would not have occurred. The installation of an automatic controller was repeatedly recommended to Epstein Equestrian, explanations were given, options were provided, and ultimately, Frank Jonkman and Sons offered to install the LCC 90 in September 1995, on the basis that it could it be returned for a full monetary credit should it prove to be unsatisfactory to Epstein Equestrian. Notwithstanding these overtures, Epstein, on behalf of Epstein Equestrian, refused to have an automatic controller installed, which resulted in the heat build-up, which led to the horizontal cracking of the acrylic sheets.

**255** With respect to the vertical cracking, I accepted Turkewitsch's evidence that the most likely cause was a combination of the lack of heat tracer cables (on the north side of the skylight), as well as the freezing and thawing of the condensation on the acrylic sheets and the partial blockage of the drainage channels by insects.

**256** In my view, the evidence is established, on a balance of probabilities, that Epstein Equestrian's refusal to allow an automatic controller to be installed allowed the condensation on the acrylic sheets to freeze and thaw, which contributed to the vertical cracking. Furthermore, with respect to any damage on the north side, Epstein Equestrian's failure to install a heat tracer cable also contributed to the vertical cracking of those acrylic sheets.

**IX. Apportionment of liability**

**257** Notwithstanding my findings concerning causation, it is appropriate to determine the respective degrees of fault or negligence as between Epstein Equestrian and Cyro. Section 3 of the *Negligence Act* provides the following:

> In any action for damages that is founded upon the fault or negligence of the defendant if fault or negligence is found on the part of the plaintiff that contributed to the damages, the court shall apportion the damages in proportion to the degree of fault or negligence found against the parties respectively.

**258** Apportionment under s. 3 "relates to fault or blameworthiness". It is important to remember that the court is *not* assessing degrees of *causation*: see *Rizzi v. Mavros*, *2008 ONCA 172*, *236 O.A.C. 4*, at paras. 49-50; see also *Snushall v. Fulsang* *(2005), 78 O.R. (3d) 142* (C.A.), at para. 29.

**259** As stated by the Divisional Court in *Litwinenko v. Beaver Lumber Co.* *(2008), 237 O.A.C. 237* (Div. Ct.), at para. 54:

> A trial Judge must determine fault or neglect under the *Negligence Act*, R.S.O., c.N-1 and under s. 3 apportion the damages in proportion to the degree of fault or neglect found against the plaintiff and the defendant. This is done on the basis of the standard of conduct to be expected of a reasonable person in the circumstances. The Court is to compare the culpability or blameworthiness on the part of each person in order to determine the degree of liability. [Citation omitted.]

**260** The Court of Appeal for Ontario has stated that, "[t]he more weight that is attached to [the plaintiff's] contributory negligence, the more the assessment of [the defendant's] negligence, which includes its moral and legal blameworthiness, is reduced": see *The Treaty Group Inc. v. Drake International Inc.* *(2007), 86 O.R. (3d) 366* (C.A.), at para. 28.

**261** The finding of fault that I have made against Cyro relates solely to its non-disclosure of the light transmittance testing results. The findings of fault that I have made against Epstein Equestrian are far-ranging, as they deal with long-standing breaches of the Contract and acts of negligence with respect to its failure to follow its experts' advice and install an automatic controller, active ventilation and supplementary heat.

**262** In the circumstances, I would apportion liability on the basis that Epstein Equestrian should be held 95% responsible and Cyro should be held 5% responsible for the damages sustained by Epstein Equestrian.

**X. Assessment of damages**

**263** Notwithstanding my findings with respect to liability and causation, I will continue on and assess Epstein Equestrian's damages.

**264** Epstein Equestrian claims the following damages:

**(a)** The cost of having Van Eck maintain, operate and repair the Skylight System, including supervision, meetings, phone calls and disbursements.

**(b)** The cost of having Turkewitsch investigate the cause of the skylight problems and conduct repairs.

**(c)** The cost of having Clemmensen and other contractors conduct investigations.

**(d)** The cost of covering the north side of the roof with cedar shake shingles.

**(e)** The future cost of replacing the south side of the roof.

**(f)** The future cost of wood and wall repairs to the riding arena.

**(g)** The cost of moving horses from King Ridge Stables to King Ridge South from 1999 to 2005.

**(h)** **Work Carried Out by Van Eck and Associated Expenses**

**265** The amount of $121,105 is claimed for Van Eck's labour. The amount of $10,595.60 is claimed for the disbursements incurred by Van Eck on behalf of Epstein Equestrian.

**266** The claims for Van Eck's labour fall into the following categories:

* Scheduled maintenance of the shutters
* General operation of the Skylight System
* Meetings with consultants, contractors and engineers, including telephone calls
* Installation of window heaters
* Installation of safety stops and heat deflectors
* Changing acrylic sheets
* Sealing cracks in the acrylic sheets
* Supervision of Purves's repairs

**267** The claim for the cost of Van Eck's labour is very difficult to assess. Van Eck did not keep contemporaneous

written records of his labour. It was not until June 2004, at the request of Epstein Equestrian, that he prepared a written summary for the labour he performed between October 1996 and May 2004. He prepared these estimates from memory. Although Van Eck impressed me as an honest witness, this leads to several difficulties, including the accuracy of his memory and the fact that he has been asked to complete the summary for Epstein Equestrian, which continues to employ his services.

**268** Similarly, the estimates Van Eck prepared between April 2005 and 2009 were prepared for Epstein Equestrian post-2009 for the purposes of this litigation. Once again, Van Eck testified that he prepared this documentation from memory without any supporting documentation. Van Eck also conceded the following in cross-examination: that he would still have been required to perform maintenance on the riding arena even if the Skylight System worked properly; that the estimates would have included some new work on the Skylight System as opposed to repairs; that he had to engage in a process where he separated out work done on the riding arena from other unrelated work that he regularly performed for Epstein Equestrian; and that the amounts were general estimates.

**269** In my view, given the above, it is reasonable to conclude that Van Eck's damage assessments unduly favour Epstein Equestrian over the Defendants. While it is always difficult to employ a percentage reduction in such circumstances, it seems reasonable, based on his evidence and my review of the documentation, to employ a reduction of 15% for all the labour costs. This would reasonably take into account the errors that one might reasonably expect Van Eck to have made.

**270** I would also not allow the following specific claims for these additional reasons:

* The claims for maintenance costs: Epstein agreed in cross-examination that even if he had received the system he wanted, he would have been required to incur maintenance costs. Epstein testified that he would have expected to pay yearly maintenance to Frank Jonkman and Sons. In fact, the Contract provided an option to have Frank Jonkman and Sons perform the maintenance at the rate of 5% of the Contract price per year, $8,147.82. This reasonable ongoing cost is more than was invoiced by Van Eck, and as such, would extinguish the claim for maintenance. This includes only claims for "scheduled maintenance" performed by Van Eck. The labour costs total $24,375.00.
* The claims for Van Eck's supervision and the installation of the window heaters: These expenses cannot be recovered from the Defendants. In addition to the failure to mitigate (discussed below), it cannot be ignored that the window heaters became necessary because there was an undue build-up of condensation in the riding arena, stemming from the fact that it was only being passively ventilated. This was not the responsibility of Frank Jonkman and Sons under the Contract, nor could it be said to stem from any alleged negligence of Cyro. Epstein Equestrian's experts repeatedly called for active ventilation with supplementary heat. The installation of the window heaters partially dealt with that problem, but not the alleged problems arising from the Skylight System. These labour costs total $1,230.00.

**271** Therefore, I would allow the following:

| | |
|---|---|
| Amount claimed | $121,105.00 |
| Less maintenance and window heater installation | $ 25,605.00 |

| | |
|---|---|
| | $ 95,500.00 |
| Less 15% | $ 14,325.00 |
| Total | $ 81,175.00 |

**272** The disbursements incurred by Van Eck consist of the following:

| | | |
|---|---|---|
| Roofmart dated July 29, 1997 | $ | 118.13 |
| Purves dated December 4, 1997 | $ | 4,284.82 |
| Cyro dated December 4, 1997 | $ | 1,603.96 |
| Van Eck reimbursement dated November 25, 1998 | $ | 2,135.10 |
| Paul Boers dated October 26, 2000 | $ | 161.18 |
| Van Eck reimbursement dated March 26, 2001 | $ | 2,213.63 |

| | | |
|---|---|---|
| Concord Hardware dated N/A | $ | 78.78 |
| Total | $ | 10,595.60 |

**273** I have reviewed the disbursements and the amounts sought are reasonable.

**274** As a result, the total amount allowed would be $91,770.60.

**(b) Turkewitsch's Invoices**

**275** Epstein Equestrian seeks reimbursement of invoices submitted by Turkewitsch as follows:

| | | |
|---|---|---|
| Oct. 25, 1996 | $ | 2,955.02 |
| Apr. 7, 1997 | $ | 4,234.85 |
| Nov. 28, 1997 | $ | 2,601.85 |
| Oct. 27, 1999 | $ | 889.17 |
| Nov. 16, 2000 | $ | 491.14 |
| Total | $ | 11,172.03 |

**276** There is no issue with respect to the amount of the invoices. The amounts charged and the disbursements incurred are reasonable.

**277** However, with respect to the April 7, 1997 invoice, I would not allow the amount for labour and materials that relate to the repair and adjustment of Dust Control System, since they do not relate to the issues in this litigation. For the same reason, I would not allow anything in the November 16, 2000 invoice that dealt only with issues concerning the Dust Control System.

**278** As a result, the amount allowed would be $6,446.04.

### (c) Remaining Invoices

**279** Epstein Equestrian also claims the following invoices:

| | |
|---|---|
| Clemmensen remedial work dated June 23, 2004 | $10,000.00 |
| Buchan, Lawton smoke dispersion test dated November 5, 1996 | $ 555.22 |
| Atkins + Van Groll glazing review August 31, 1997 | $ 374.50 |
| Vaccher (original work + ground-level window heaters) dated January 19, 1996 | $12,681.61 |
| Mark Brook dated July 21, 2004 and August 24, 2004 | $ 4,750.80 |
| Total | $28,362.13 |

**280** I do not have any difficulty with the amounts sought in the above invoices, with the exception of the invoice tendered by Clemmensen dated June 23, 2004. The invoice provides no analysis as to how it was prepared. Given its late date and the fact that there is no explanation for this invoice at trial, I am not prepared to allow any amount for it.

**281** With respect to the Vaccher invoice, for the same reasons above concerning the window heaters, I would not allow Epstein Equestrian to claim the cost of that invoice. The installation of the window heaters was not caused by any of the alleged negligence or breach of contract allegations against the Defendants.

**282** As a result, the amount allowed would be $5,680.52.

### (d) Covering of the North Side

**283** Epstein Equestrian seeks the amount of $121,391.02 for the cost of covering the north roof with cedar shake shingles. I have carefully reviewed the various invoices that make up the total and they seem reasonable.

**284** However, I would not allow this amount. The evidence at trial disclosed that there was very little cracking of the acrylic sheets on the north side. The north side of the roof is now covered by cedar shake shingles since the acrylic sheets were not resulting in much solar heat gain. Nobody from Frank Jonkman and Sons or Cyro recommended putting acrylic sheets on the north side. In fact, Turkewitsch clearly testified that he did not think that this was a good idea. In my view, the north side was ultimately covered by cedar shake shingles for reasons unrelated to the alleged failure of the Skylight System. Rather, it was because the use of acrylic sheets on the north side was an impractical idea from the outset. In fact, a number of the acrylic sheets from the north side were ultimately used to replace damaged acrylic sheets on the south side.

### (e) Covering of the South Side

**285** Epstein Equestrian now wants to replace the acrylic sheets on the south side with a double-glazed glass product. The Defendants submit that Epstein Equestrian does not plan to carry this out, but rather, the amount claimed is a tactic to increase damages. I disagree. I accept that Epstein Equestrian is looking for an alternative to replace the acrylic sheets on the south side, and I find that the product contemplated is reasonable.

**286** With respect to the issue of quantum, Brook testified on behalf of Epstein Equestrian on the cost of replacing the acrylic sheets. He testified that the cost would be in the neighbourhood of $535,000.00, including all taxes and contingencies. The difficulty I have with this estimate is that while Brook is undoubtedly a well-qualified engineer with an extensive history in glass building construction, he would not be doing any of the work and he was simply providing a quote based on his expertise. For example, Brook included, in his estimate, a contingency of $40,000.00, consulting and engineering fees of $30,000.00, construction site management of $20,000.00, and project management of $30,000.00. There was no real support given for these numbers other than his own belief. Furthermore, he allowed $30,000.00 for a heating system where one never before existed. It makes this claim somewhat ironic given the fact that Epstein Equestrian has refused to install a heating system for over 19 years. Finally, Brook did not receive any quotes or estimates from any companies that would actually do the work. Therefore, the actual cost of the work is unknown. Whether more favourable prices could have been obtained if the project was put out for tender is also unknown.

**287** It is also important to note that Brook provided a quote in 2004 in the range of $165,000.00 to $185,000.00, plus a 15% contingency and taxes, which is well below the current estimate. The repairs could have been carried out more cheaply nine years ago and the cost of conducting the repairs now is higher. This is presumably due to inflationary increases in cost and labour.

**288** Epstein Equestrian should have conducted the repairs in 2004. Epstein testified at trial that finances were not a problem. In the circumstances, I would assess the damages for replacing the south side of the roof in the amount of $300,000.00. In my view, it can be justified as either constituting very fair compensation with respect to the Brook quote of 2004, or a fair estimate of the most recent quote provided by Brook, when one takes into account the rather speculative nature of some of the items noted and the inclusion of the amount for a heating system which does not currently exist in the riding arena. The quote also involves a claim for wood cleaning, which is claimed for separately by Epstein Equestrian below.

### (f) Wood and Wall Repair

**289** Epstein Equestrian obtained a quote from Alternative Restoration Service Limited ("Alternative Restoration") in the amount of $60,330.07, for repairs to the inner wood work and drywall. Van Eck testified that the interior damage to the wood and drywall resulted from the leaking of the skylight. However, Pressnail concluded, from his review of the photographs, that the interior damage was a result of condensation that was occurring beneath the Skylight System in the riding arena. If this was the case, the damage would not be related to any acts or omissions on the part of the Defendants. Upon my review of the evidence, I find that the water damage arose from both causes. It is impossible to determine exactly how much damage was caused by each issue. From my review of the photographs,

it would be reasonable to allow Epstein Equestrian 50% of its claim, $30,164.04, for damages from the leaking skylight.

**(g) Cost of Moving Horses to King Ridge South**

**290** Epstein Equestrian seeks damages for costs incurred between 1999 and 2005 (it abandoned all claims after 2005 in closing submissions) for transporting, boarding, feeding and caring for and feeding horses that it shipped to King Ridge South. The amount totals $1,700,752.28 and is calculated as follows:

*1999*

| | | |
|---|---|---|
| Boarding fee | $ | 149,493.75 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 6,600.00 |
| Hillcrest Farm (shipping horses Florida/Toronto) | $ | 6,800.00 |
| Subtotal | $ | 162,893.75 |

*2000*

| | | |
|---|---|---|
| Boarding fee | $ | 221,430.75 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 9,550.00 |
| Ameri-Can (customs charges) | $ | 1,049.18 |

| | | |
|---|---|---|
| Perry Transport Ltd. (shipping horses Toronto/Florida/Toronto) | $ | 10,724.60 |
| Hillcrest Farm (shipping horses Florida/Toronto) | $ | 3,150.00 |
| Subtotal | $ | 245,904.53 |

*2001*

| | | |
|---|---|---|
| Boarding fee | $ | 226,713.75 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 16,450.00 |
| Ameri-Can (customs charges) | $ | 2,955.05 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 2,771.00 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 22,030.50 |
| Subtotal | $ | 270,920.30 |

*2002*

| | | |
|---|---|---|
| Boarding fee | $ | 235,317.50 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 17,272.50 |
| Ameri-Can (customs charges) | $ | 160.17 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 486.01 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 20,000.00 |
| Subtotal | $ | 273,236.18 |

*2003*

| | | |
|---|---|---|
| Boarding fee | $ | 222,953.69 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 20,657.50 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 24,554.74 |

| | | |
|---|---|---|
| Subtotal | $ | 268,165.93 |
| *2004* | | |
| Boarding fee | $ | 200,860.00 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 13,950.00 |
| Ameri-Can (customs charges) | $ | 53.92 |
| Russell A. Farrow (U.S.) Inc, (customs charges) | $ | 50.22 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 2,156.95 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 20,429.08 |
| Subtotal | $ | 237,500.17 |
| *2005* | | |
| Boarding fee | $ | 186,215.00 |

| | | |
|---|---|---|
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 39,926.25 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 1,869.31 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 14,121.60 |
| Subtotal | $ | 242,132.16 |
| Total | | $1,700,752.00 |

**291** It is quickly apparent that the most significant costs are the boarding fees. Epstein's related companies, King Ridge Stables and King Ridge South entered into an agreement whereby King Ridge Stables would pay King Ridge South a yearly amount for boarding the horses.

**292** I would reduce the amount sought for boarding fees to reflect the fact that the horses were only kept at King Ridge South for approximately six months per year and were then returned to King Ridge Stables when conditions at King Ridge Stables permitted their return. In the circumstances, it would not be reasonable to assess boarding fees on a 12-month-a-year basis. As a result, there should be a 50% reduction for all years but 1999, since the horses were not at King Ridge South for a full year. Accordingly, a smaller reduction would be appropriate for 1999, being $39,493.75.

**293** Epstein Equestrian submits that the amount should not be reduced because if it had rented stalls from another entity, it would have had to pay rent on a 12-month-a-year basis. There is no evidence of this. Furthermore, Epstein, through his two companies, chose to enter into a yearly lease agreement on an ongoing basis. I do not find that there is anything wrong with this as between King Ridge Stables and King Ridge South; however, it is excessive and unreasonable to try to pass along the entire amount of this claim to the Defendants when the horses were only being kept at King Ridge South for approximately six months each year.

**294** There was much discussion in closing submissions with respect to the amounts claimed for the expenses aside from the boarding fee. Initially, some of the claims appeared to have been made in error since they did not relate to the transportation of horses to King Ridge South, but rather, they related to other activities of Epstein Equestrian. These have been deleted and I am satisfied that the remainder of the amounts claimed, as noted above, are reasonable.

**295** Having made the reduction for the boarding fees, I assess Epstein Equestrian's claim for moving the horses to King Ridge South between 1999 and 2005 at $1,014,513.90. The calculation is set out as Schedule "C" to this judgment.

**296** However, I would not allow any amount for this portion of the claim for the reasons set out below.

**297** I do not accept Epstein's explanation that it was the Skylight System failure that caused him to begin taking his horses to Florida during the winter months. In my view, the evidence disclosed that this was the natural evolution of his high-end horse breeding, training, showing and sales business.

**298** I find that this is the case for the following reasons:

* Epstein began his breeding operation in approximately 1998.
* Starting in 1990, Epstein's horse business grew from 7 or 8 horses to approximately 114. Graham testified that he never expected the horse operation to grow that large in such a short period of time.
* Palm Beach, Florida is the preferable location to show horses during the winter months for sales purposes, as opposed to King City, Ontario.
* There is no circuit in Ontario for the showing of the horses similar to the one in Florida.
* The showing season in Palm Beach increased from 6 to 12 weeks, which increased the attraction of having horses at King Ridge South.
* The evidence of Barbara Mitchell, an expert in the area of horse training, was clear that most, if not all, of the high-end equestrian operations in Ontario have farms in the southern United States for use in the winter months.
* Graham testified that it is better to have the horses in Florida in the winter months as opposed to stabling them in Ontario for a number of reasons, including climate and grazing.
* It is easier to sell the horses in the Florida in the winter months as opposed to transporting buyers to Ontario.

**299** All of the above is consistent with Epstein's desire to operate an Olympic-quality horse facility. I do not accept that he would have continued to operate primarily in Ontario in the winter while his competitors travelled to the southern United States.

**300** Lastly, it is my view that the entire cost of moving horses to Florida was not reasonably foreseeable and too remote for the following reasons.

**301** As stated by Zuber J. in the case of *Kienzle v. Stringer* (1981), 35 O.R. (2d) 85 (C.A.), at p. 90:

> It may be helpful to recognize that in using the terms "reasonably foreseeable" or "within the reasonable contemplation of the parties" courts are not often concerned with what the parties in fact foresaw or contemplated. (I leave aside those cases where the disclosure of special facts may lead to the conclusion that a party has assumed an extraordinary risk.) The governing term is reasonable and what is reasonably foreseen or reasonably contemplated is a matter to be determined by a court. These terms necessarily include more policy than fact as courts attempt to find some fair measure of compensation to be paid to those who suffer damages by those who cause them. [Citation omitted.]

**302** I accept Jonkman's and Siemens's evidence that, at the time Epstein Equestrian decided to use the Cyro product and install the Skylight System, it was never made known to Jonkman and Siemens that it was Epstein's intention to develop an Olympic-quality horse business and to expand the business from roughly 12 to 14 horses, to over 100 horses. Certainly, it was reasonably foreseeable that if the Skylight System was faulty, damages would occur to the facility itself and there may be some modest costs associated with that. However, it was *not* reasonably foreseeable that the Defendants would have to pay for the transport of over 100 horses to and from Florida.

**303** Accordingly, had an award been made, I would reduce the cost of moving the horses to Florida by 85% to reflect a fair measure of compensation.

**Assessment**

**304** But for my previous findings on breach of contract, contributory negligence and causation, and my findings below on the issue of mitigation, I would award Epstein Equestrian the following damages:

| | | |
|---|---|---|
| (a) | Work Carried out by Van Eck and Associates | $ 91,770.60 |
| (b) | Turkewitsch's invoices | $ 6,446.04 |
| (c) | Remaining invoices | $ 5,680.52 |
| (d) | Covering of the North Side | nil |
| (e) | Covering the South Side | $300,000.00 |
| (f) | Wood and Wall Repair | $ 30,164.04 |
| (g) | Cost of Moving Horses to King Ridge South | nil |
| Total | | $434,061.20 |

**XI. Mitigation**

**305** For the reasons below, I have concluded that Epstein Equestrian failed to mitigate its losses by virtue of its failure to install an automatic controller, add supplementary heat and install proper ventilation.

**306** The principle behind mitigation was stated by the Ontario Court of Appeal in *Burke v. Cory* (1959), 19 D.L.R. (2d) 252 (Ont. C.A.), at pp. 263-264:

> It is well settled that a plaintiff cannot, in an action for damages, recover for losses which could have been prevented by the exercise of ordinary care on his part. This principle was enunciated in *Jamal v. Moolla Dawood Sons & Co.*, [1916] 1 A.C. 175 at p. 179 in these words:
>
> > "It is undoubted law that a plaintiff who sues for damages owes the duty of taking all reasonable steps to mitigate the loss consequent upon the breach and cannot claim as damages any sum which is due to his own neglect."

**307** As stated by the Supreme Court of Canada in *Southcott Estates Inc. v. Toronto Catholic District School Board*, 2012 SCC 51, 296 O.A.C. 41, at para. 25:

> On the other hand, a plaintiff who does take reasonable steps to mitigate loss may recover, as damages, the costs and expenses incurred in taking those reasonable steps, provided that the costs and expenses are reasonable and were truly incurred in mitigation of damages (see P. Bates, "Mitigation of Damages: A Matter of Commercial Common Sense" (1991-92), 13 *Advocates Q.* 273). The valuation of damages is therefore a balancing process: as the Federal Court of Appeal stated in *Redpath Industries Ltd. v. Cisco (The)*, [1994] 2 F.C. 279, at p. 302,: "The Court must make sure that the victim is compensated for his loss; but it must at the same time make sure that the wrongdoer is not abused." Mitigation is a doctrine based on fairness and common sense, which seeks to do justice between the parties in the particular circumstances of the case.

**308** Reasonable conduct is a question of fact. An owner is required to provide its contractor with a reasonable opportunity to correct its own work, rectify the deficiencies or complete any work. If the owner denies the contractor that opportunity, the owner may be found to have failed to mitigate his damages: *C.S. Bachly Builders Ltd. v. Lajlo*, [2008] O.J. No. 4444 (S.C.).

**309** The Defendants submit that Epstein Equestrian failed to mitigate its damages by reason of the following:

* It failed to rent similar facilities in Canada.
* It failed to replace the acrylic sheets with glass.
* It failed to replace the acrylic sheets with Impact Modified acrylic sheets.
* It failed to replace the acrylic sheets on the south side with a solid roof (as it did with the north side in 2004).
* It failed to install an automatic controller.
* It failed to add supplementary heat.
* It failed to install a proper ventilation system.

**310** I do not find that Epstein Equestrian failed to mitigate its damages by reason of its failure to rent similar facilities in Canada. The evidence, in my view, discloses that efforts were made in this regard and that there were no suitable alternatives.

**311** With respect to the assertions that Epstein Equestrian ought to have replaced the damaged Skylight System with additional Cyro product, glass or a solid roof, I do not fault Epstein Equestrian for not using the Cyro product since it could not be determined why the Cyro acrylic sheets were failing. I also do not find fault with Epstein Equestrian for not replacing the roof with a solid roof. It is reasonable to allow for the replacement of the skylight with another similar system. In and of itself, the failure to replace the roof does not constitute a failure to mitigate.

**312** I do find that Epstein Equestrian failed to mitigate its losses by failing to install an automatic controller, to add supplementary heat and to install proper ventilation. A combination of these three measures would have likely prevented the majority of the damage to the Skylight System, alleviated problematic air quality conditions within the riding arena, and reduce condensation.

**313** The evidence at trial established that the recommendations to install supplementary heat and proper ventilation started in 1993. The Contract called for the Caloristat to be installed. In my view, all of the necessary work concerning the installation of supplementary heat, ventilation and an automatic controller could have been completed, at the latest, by the end of 1995. With respect to the automatic controller, Turkewitsch, in his September 29, 1995 letter, clearly set out that the LCC 90 could be supplied and installed in the fall of 1995.

**314** The cracking of the acrylic sheets began, at the earliest, in the fall of 1995, at which time some very minor cracking was observed. The more significant horizontal cracking did not begin until 1996. Had Epstein Equestrian mitigated its losses, it could have prevented the damages that began to flow in 1996.

**315** As noted above, Turkewitsch testified that, in his opinion, the installation of an automatic controller would likely have prevented the excessive heat build-up that occurred between the skylight and the shutters. Turkewitsch testified that the Argus controller could have measured humidity and coordinated the shutters, cupola louvres and Dust Control System. Even Clemmensen conceded, in hindsight, that the Caloristat should have been installed. In fact, had Epstein Equestrian installed an automatic controller, the Skylight System would likely have been functioning and the riding arena would likely have been usable. Therefore, the failure of Epstein Equestrian to install an automatic controller is, by itself, a complete lack of mitigation, in addition to being a breach of contract and contributory negligence.

**316** Epstein also failed to install supplementary heating, even though this was recommended by Grant, Kani, Siemens and Jonkman. The cost of the heat would have been minimal, and Kani projected that it could be as little at $800 per year. It is critical to point out that Epstein Equestrian's own expert, Pressnail, testified that the building could be rehabilitated and that the introduction of supplementary heat would be important. The fact that supplementary heat would have been of assistance is evidenced by the fact that when the window heaters were installed, it solved the problem of the condensation on the windows.

**317** Furthermore, there were serious problems with ventilation in the riding arena, as evidenced by some of the reports, particularly the report of Buchan. Throughout, Epstein Equestrian made no attempts to install any form of active ventilation system, but rather, continued to rely on the passive ventilation within the riding arena, which was obviously inadequate.

**318** Based on all the evidence, the Skylight System could have been properly functional and the riding arena would not have had major air quality concerns if Epstein Equestrian had installed an automatic controller, added supplementary heat and installed a ventilation system.

**319** What occurred, unfortunately, is that Epstein had it in his mind that he could obtain certain levels of solar heat gain that were never possible, and when this failed to materialize, he obstinately refused to consider any other options. He began to, in my view, unfairly cast the blame solely on Frank Jonkman and Sons and Cyro. This is evidenced by the following: (i) his unwillingness to admit that Jonkman and Siemens told him from the outset that an unheated riding arena was unlikely to succeed; (ii) his insistence that Turkewitsch told him to add acrylic sheets to the north side of the roof when this was not the case; (iii) his refusal to follow the advice of Kani and Grant to add

supplementary heat; (iv) his failure to follow the advice of Conserval, Buchan and Brook with respect to the critical issues of ventilation and humidity; (v) his failure to add an automatic controller; (vi) his insistence that Van Eck continue to open and close the shutters manually as opposed to installing a Caloristat or any other automatic controller when this was clearly inadequate; and (vii) his ultimate decision to give up on the riding arena and leave it in a damaged state and pursue litigation. Considering the number of people involved in the project, the nature of the project and the various problems that arose within the riding arena, it was unreasonable for Epstein Equestrian to place all the responsibility on Frank Jonkman and Sons and Cyro, and do virtually nothing to try to mitigate damages by improving the condition of the riding arena. Accordingly, I find that Epstein Equestrian entirely failed to mitigate its losses and award no damages.

**DISPOSITION**

**320** Epstein Equestrian's claim against Frank Jonkman and Sons and Cyro is dismissed. I further make no findings of negligence against Clemmensen or Kani. I assess Epstein Equestrian's damages in the amount of $434,061.20, but do not award any damages.

**321** Judgment accordingly.

**322** The Defendants have been successful and are entitled to costs. If these cannot be agreed upon by the parties, I will accept written submissions on a 15-day turnaround basis beginning with the Defendants. Alternatively, arrangements can be made through my assistant to set a date for oral submissions.

**323** Lastly, I would like to express my gratitude to counsel for their excellent work and display of civility throughout this long trial. It was appreciated.

T.J. McEWEN J.

* * * * *

**SCHEDULE "A"**

**324** With respect to the issues in the lawsuit, the following Definitions, General Conditions and Specifications are of import:

**DEFINITIONS**

1. **The Contract:** The Contract Documents form the Contract. The Contract is the undertaking by the parties to perform their respective duties, responsibilities and obligations as prescribed in the Contract Documents and represents the entire agreement between the parties. The Contract supersedes all prior negotiations, representations or agreements, either written or oral, including the bidding documents. The Contract may be amended only as provided in the General Conditions of the Contract.
2. **Consultant:** The Consultant is the person, firm or corporation identified as such in the Agreement, and is an Architect or Engineer licensed to practice in the province or territory of the Place of the Work, and is referred to throughout the Contract Documents as if singular in number and masculine in gender.

13. **Substantial Performance of the Work:** Substantial Performance of the Work is as defined in the lien legislation applicable to the Place of the Work. If such legislation is not in force or does not contain such definition, Substantial Performance of the Work shall have been reached when the Work is ready for use or is being used for the purpose intended and is so certified by the Consultant.

**Total Performance of the Work:** Total Performance of the Work means when the entire Work, except those items arising from the provisions of GC 24 - WARRANTY, has been performed to the requirements of the Contract Documents and is so certified by the Consultant.

**THE GENERAL CONDITIONS OF THE STIPULATED PRICE CONTRACT**

**GC1 DOCUMENTS**

**1.3** The intent of the Contract Documents is to include the labour, products and services necessary for the performance of the Work in accordance with these documents, it is not intended, however, that the Contractor shall supply products or perform work not consistent with, covered by or properly inferable from the Contract Documents.

**GC 5 OWNER'S RIGHT TO PERFORM WORK OR STOP THE WORK OR TERMINATE CONTRACT**

**5.4** If the Contractor fails to correct the default in the time specified or subsequently agreed upon, the Owner, without prejudice to any other right or remedy he may have, may:

(a) correct such default and deduct the cost thereof from any payment then or thereafter due the Contractor provided the Consultant has certified such cost to the Owner and the Contractor, or

(b) terminate the Contractor's right to continue with the Work in whole or in part or terminate the Contract

**5.5** If the Owner terminates the Contractor's right to continue with the Work under the conditions set out in this General Condition, he shall:

(a) be entitled to take possession of the premises and products and utilize the construction machinery and equipment the whole subject to the rights of third parties, and finish the Work by whatever method he may consider expedient but without undue delay or expense, and

(b) withhold further payments to the Contractor until the Work is finished, and

(c) upon Total Performance of the Work, charge the Contractor the amount by which the full cost of finishing the Work as certified by the Consultant, including compensation to the Consultant for his additional services and a reasonable allowance as determined by the Consultant to cover the cost of corrections to work performed by the Contractor that may be required under GC 24 - WARRANTY, exceeds the unpaid balance of the Contract Price; however, if such cost of finishing the Work is less than the unpaid balance of the Contract Price, he shall pay the Contractor the difference, and

(d) on expiry of the warranty period, charge the Contractor the amount by which the cost of corrections to his work under GC 24 - WARRANTY exceeds the allowance provided for such corrections, or if the cost of such corrections is less than the allowance, pay the Contractor the difference.

**GC 14 CERTIFICATES AND PAYMENTS**

**14.12** As of the date of Total Performance of the Work, as set out in the certificate of Total Performance of the Work, the Owner expressly waives and releases the Contractor from all claims against the Contractor including without limitation those that might arise from the negligence or breach of contract by the Contractor except one or more of the following:

(a) those made in writing prior to the date of Total Performance of the Work and still unsettled;

(b) those arising from the provisions of GC 19 - INDEMNIFICATION or GC 24 - WARRANTY; *In the Common Law provinces GC 14.12(c) shall read as follows:*

(c) those made in writing within a period of six years from the date of Substantial Performance of the Work, as set out in the certificate of Substantial Performance of the Work, or within such shorter period as may be prescribed by any limitation statute of the province or territory of the Place of the Work and arising from any liability of the Contractor for damages resulting from his performance of

the Contract with respect to substantial defects or deficiencies in the Work for which the Contract is proven responsible.

As used herein "substantial defects or deficiencies" means those defects or deficiencies in the Work which affect the Work to such an extent or in such a manner that a significant part or the whole of the Work is unfit for the purpose intended by the Contract Documents.

*In the Province of Quebec GC 14.12(c) shall read as follows:*

(c) those arising under the provisions of Article 1688 of the Civil Code.

**GC 21 PROTECTION OF WORK AND PROPERTY**

**21.1** The Contractor shall protect the Work and the Owner's property and property adjacent to the Place of the Work from damage and shall be responsible for damage which may arise as the result of his operations under the Contract except damage which occurs as the result of:

(a) errors in the Contract Documents;

(b) acts of omissions by the Owner, the Consultant, Other Contractors, their agents and employees.

**GC 24 WARRANTY**

**24.1** The Contractor shall be responsible for the proper performance of the Work only to the extent that the design and specifications permit such performance.

**24.2** Subject to paragraph 24.1 the Contractor agrees to correct promptly, at his own expense, defects or deficiencies in the Work which appear prior to and during the period of one year from the date of Substantial Performance of the Work, as set out in the certificate of Substantial Performance of the Work, or such longer periods as may be specified for certain products or work.

**24.3** During the period provided in GC 3 - CONSULTANT, paragraph 3.2, the Consultant shall promptly give the Contractor written notice of observed defects and deficiencies.

**SECTION 07825**

**METAL FRAMED PLASTIC SKYLIGHT SYSTEM**

**PART 1: GENERAL**

**1.2 DESCRIPTION**

**1.2.1 Work Included**

a. Provide skylight system over Riding Hall.

b. The Work of this Section is to be provided along with the Work of Section 12517, Skylight Shutter System, and Section 15485, Overhead Dust Control System, as a single integrated system and Contract.

**1.2.3 System Description**

a. **Performance Characteristics:**

Incorporate the higher air and water tightness characteristics of a double-sealed rainscreen (drained cavity) system.

b. **System General:**

(i) To be as set out in Drawings prepared for this Project by Frank Jonkman and Sons Ltd., Bradford, ON, and as specified herein.

(ii) To cover roof from ridge down each side of roof 20'-9" and 144'-0" along length of building with framing at 4'-0" centres along length of building coincident with centrelines of structural elements,

running from flashed and sealed double member of ridge to member at base of lower roof curb. To be flashed around perimeter onto roof flashing. The system to be glazed by 1200 mm wide by approximately 20 ft (6m) long glazing sheets.

c. **System Structural:**

(i) System designed to meet performance requirements with the following strategy:

- Every second vertical framing member bearing an arch or rafters and every other vertical member spanning unloaded over, and clear of, purlins.

- Under snow or wind loads, clear spanning framing members and glazing deflect to bear on purlins.

d. **System Moisture Penetration Strategy:**

Entire system to be drained out under lower flashing by system of overlapping connected drainage channels integrated with glazing structural framing mullions. Mullion caps wet sealed to ridge flashing and to glazing at base and all connections of framing members wet sealed.

**1.2.4 Alternatives:**

a. **System Maintenance Contract:**

(i) If requested by the Owner, provide after the specified warranty period a maintenance program consisting of inspection and all necessary service to maintain system at least three times a year, which would include all parts and labour, for an annual fee of five per cent of the total Contract Price for all three Sections per year.

(ii) The System Maintenance Contract would include the Work of this Section, Section 12517, Skylight Shutter System, and Section 15485, Overhead Dust Control System, as a single integrated system.

(iii) The System Maintenance Contract would be renewable on an annual basis at the discretion of the Owner.

(iv) Under the System Maintenance Contract:

- A schedule would be established for inspections, mutually agreed upon by the Owner and Installer.

- Notification would be given by the Installer to the Owner one week in advance of inspections and maintenance and repair work, with Owner's approval given within two days of the notification.

- Inspections and servicing would be co-ordinated with the Owner's security and maintenance requirements.

- A full report of all points of inspection would be made within 14 days of each inspection.

- A log book would be maintained by the installer at the Site, recording all visits, deficiencies noted, work and parts required, and projected foreseeable failures and recommendations.

**1.3 QUALITY ASSURANCE**

1.3.1 **Qualifications of Installer:**

Be trained and employed by the system designer, be experienced in the installation of the designer's system and specified products, and be capable of workmanship which will provide the performance specified and highest quality workmanship in keeping with the system designer's reputation.

1.4 **SUBMITTALS**

1.4.1 **Shop Drawings:**

Submit complete system design and installation Drawings. Stamp all drawings by a professional structural engineer registered to practice in Ontario.

1.5 **PRODUCT DELIVERY, STORAGE AND HANDLING**

1.5.1 Store plastic glazing sheets indoors, if possible, until ready to install. Storing in direct sunlight may cause protective polyethylene masking to stick to sheets. If stored outdoors, protect from sunlight with a white opaque covering.

1.5.2 To prevent insects and dirt accumulating within panels, ensure that polyethylene (PEG) gasket and/or aluminum tape is employed at panel ends to close off ribbed openings.

1.6 **WARRANTY**

Provide a **one-year** warranty for this Work in conjunction with Section 12517, Skylight Shutter System, and Section 15485, Overhead Dust Control System.

**PART 2 PRODUCTS**

2.1 **MATERIALS**

2.1.1 **Framing Members / Mullions:** Mill finish extruded sections of aluminum, AA Type 6063T6 "SDP System" as designed by Frank Jonkman and Sons Ltd., Bradford, ON, consisting of flat cap and lower mullion members and min wall thickness of 1.5 mm at integral condensation gutter and 2.5 mm across structural parts of section. Cap and bottom mullion members connected at 300 mm by a cadmium-plated steel screw. Cap and base members formed to interlock with flexible EPDM performed glazing blocks and to accommodate expansion and contraction, within system, of glazing sheets.

2.1.2 **Glazing Sheets:** 16 mm thick cellular acrylic glazing panels with 32 mm wide full length interior hollow cells conforming to CAN 2-12.12-M, in opalescent white colour with a light transmittance of 70 per cent and an insulation value of R(winter)=1.72, in 1200 mm width by ± 20 ft (6 m) length as required, acceptable product: Acrylite SDP 16/32 Architectural Plastic Glazing in Colour No. 06310 by Cyro Canada Inc., complete with manufacturer's polyethylene (PEG) gaskets designed to control air movement and seal out debris, supplied for bottom of sheet only.

**PART 3 EXECUTION**

3.2 **INSTALLATION**

3.2.1 **General:**

a. Install systems in accordance with approved shop drawings and the system designer's recommended practice for best work.

b. Make accommodation for thermal expansion and deflection under loads of glazing sheets and mullions.

c. Install system to provide drainage throughout gutter system to exit under base flashing.

3.2.2 **Connections and Sealing of Frame:**

a. Cut and assemble framing to form neat joints.

b. Seal all connections between members at top with wet sealant.

c. Seal upper side of cap mullions at all cross members with wet sealant against glazing sheet or flashing.

3.2.3 **Flashing:**

a. Seal ridge with aluminum sheet flashing.

b. Flash base mullion out over roof flashing, allowing clearance for drainage of system.

c. Use aluminum square extruded sections as blocks to hold flashing in mullions.

d. Flashing to be fabricated and installed to present neat, straight bands and flat surfaces without oil-canning in the finished work. Do not mar flashing finish.

**3.3 ADJUSTMENT AND CLEANING**

3.3.1 Adjust system to meet site conditions including roof vent monitors to perform as specified.

3.3.2 Remove glazing masking and clean all parts to new condition at Substantial Performance.

**SECTION 12517**

**SKYLIGHT SHUTTER SYSTEM**

**PART 1: GENERAL**

1.2 **DESCRIPTION**

1.2.1 **Work Included**

a. Provide integrated, two-part, motorized, operable, insulated, self-sealing skylight shutter system automatically controlled by a central control unit with sensors to control interior ambient temperatures of Riding Hall by opening to let in sunlight for heat and closing to contain heat. Optionally, system may also open to extradite heat on summer evenings.

b. he Work of this Section is to be provided along with the Work of Section 07825, Metal Framed Plastic Skylight System, and Section 15485, Overhead Dust Control System, as a single integrated system and Contract.

1.2.3 **System Description:**

a. **Performance**:

Provide sufficient insulation value across system panels and framing and sufficient air-tightness at seals when closed to:

(i) Reduce air travel through edges due to stack effect, so as to control the formation of condensation on the underside of the skylight to maintain such below capacity of skylight condensate drainage system to eliminate condensate dripping into interior of Riding Hall and

(ii) Maintain a minimum insulating value across the whole system of R=8 (winter)

d. **Shutter Sealing System**

(i) Each shutter unit to be fitted with a continuous rubber air seal system to provide an air seal when shutter unit is closed between shutter unit and curb angles at timber arches at sides, ridge closure at top and "L" section at bottom of shutter unit opening.

e. **Track System:**

(i) Each shutter unit to ride on seven rollers per side along a ± 38 ft (12 m) long track bolted to sides of timber arches.

f. **Shutter Control System:**

(i) Shutter units to be opened and closed by a cable system, with one cable attached at one point to each side of each shutter unit.

(ii) Reversing relay units controlled through disconnect switches by a central control unit.

h. **System Operation:**

(i) Controller senses dawn and dusk.

(ii) Shutter system closed between dusk and dawn.

(iii) After dawn, controller opens shutter system when a certain adjustable sunlight intensity is reached and closes system when sunlight intensity falls below that point again. A timer avoids rapid cycling.

(iv) When a certain adjustable peak high temperature in the Riding Hall is reached, the controller shuts the shutters.

(v) If, on a cold day, the initial opening of the shutters causes a sudden temperature drop, the shutters close again for a while then reopen.

1.2.4 **Alternatives**

a. **Alternative Control Computer:**

(i) This Section can offer a control computer for additional cost which would replace the control units for this Section and Section 15485, Overhead Dust Control Systems, and provide central control for both systems as well as having capacity to control other building systems.

(ii) For this Section, this control computer could additionally open the shutter system on Summer evenings to permit extradition of building heat to avoid some summer heat buildup. Other optional operations are also possible.

(iii) The Alternate Control Computer offered is a DGT Volmatic LCC900 by Dansk Gartneri Teknik A/S of Denmark.

b. **System Maintenance Contract:**

(i) If requested by the Owner, provide after the specified warranty period a maintenance program consisting of inspection and all necessary service to maintain system at least three times a year, which would include all parts and labour, for an annual fee of five per cent of the total Contract Price for all three Sections per year.

(ii) For this Section, this control computer could additionally open the shutter system on Summer evenings to permit exradiation of building heat to avoid some summer head buildup. Other optional operations are also possible.

(iii) The alternate Control Computer offered is a DGT Volmatic LCC900 by Dansk Gartneri Tekmnik A/S of Denmark.

(iv) Under the System Maintenance Contract:

- A schedule would be established for inspections, mutually agreed upon by the Owner and Installer.

- Notification would be given by the Installer to the Owner one week in advance of inspections and maintenance and repair work, with Owner's approval given within two days of the notification.

- Inspections and servicing would be co-ordinated with the Owner's security and maintenance requirements.

- A full report of all points of inspection would be made within 14 days of each inspection.

- A log book would be maintained by the installer at the Site, recording all visits, deficiencies noted, work and parts required, and projected foreseeable failures and recommendations.

## 1.3 QUALITY ASSURANCE

### 1.3.1 Qualifications of Installer

Be trained and employed by the system designer, be experienced in the installation of the designer's system and specified products, and be capable of workmanship which will provide the performance specified and highest quality workmanship in keeping with the system designer's reputation.

## 1.4 SUBMITTALS

### 1.4.1 Shop Drawings

Submit complete system design and installation Drawings. Stamp all drawings by a professional engineer registered to practice in Ontario.

## 1.7 WARRANTY

Provide a one-year warranty for this Work in conjunction with Section 07825, Metal Framed Plastic Skylight System, and Section 15485, Overhead Dust Control System.

## PART 2 PRODUCTS

2.1.1 **Insulated Panels:** 2 in (50 mm) think by 40 in (1200 mm) by ± 7'4" (2.235 m) panels composed of 2" (50 mm) thick core of expanded polystyrene insulation board, as per Section 07200, Type C-1 with a bonded skin on each broad side of 0.022 in (0.559 mm) thick prefinished white painted, random pebble-embossed aluminum sheet with an overall through-panel insulation value of R=10 (winter).

2.1.18 **Sensors**

a. Light intensity: one per roof side, mounted outside on roof.

b. Solar radiation: one per roof side, mounted in one bay, in cavity above shutter.

c. Air temperature: one, mounted below ridge in Riding Hall interior (below shutters).

d. Or to suit selected controller.

2.1.19 Controller Units: Two required, with adjustable dawn and dusk sensor controls, adjustable energy intensity upper limit control, adjustable inside (shock) temperature controller and test / normal mode switch, acceptable product: DGT-Volmatic Caloristat SV 9, product no: 50040 by Dansk Gartneri Teknik A/S of Denmark.

2.2.3 Fabricate assemblies to accommodate thermal expansion and contraction of all the parts.

* * * * *

**SCHEDULE "B"**

Court File No. 00-CV-197311CMA

ONTARIO

SUPERIOR COURT OF JUSTICE

BETWEEN:

EPSTEIN EQUESTRIAN ENTERPRISES INC.

Plaintiff

- and -

FRANK JONKMAN AND SONS LIMITED

and CYRO CANADA INC.

Defendants

- and -

CLEMMENSEN & ASSOCIATES LIMITED

and ALLEN KANI ASSOCIATES

Third Parties

Full and Final Release and Partial Settlement Agreement

Whereas Clemmensen & Associates Limited ("Clemmensen") provided construction management and related services to Epstein Equestrian Enterprises Ltd ("Epstein") in connection with the design and construction of a riding arena at the Epstein premises (the "Arena"), commencing in or about 1992;

And whereas Clemmensen, in its capacity as construction manager, acted as agent for Epstein in communicating with contractors, consultants and others;

And whereas Allen Kani Associates ("Kani") was retained by Clemmensen in February 1993 to perform thermal modelling in connection with the design and construction of the Arena;

And whereas Epstein has brought an action against Cyro Canada Inc. ("Cyro") and Frank Jonkman and Sons Ltd. as the result of deficiencies in the roof of the Arena;

And whereas Cyro has issued a Third Party Claim against Clemmensen and Kani (Clemmensen and Kani collectively, "the Settling Parties") seeking contribution and indemnity under the Negligence Act in respect of alleged negligence on the part of Clemmensen and Kani in the services they provided in respect of the Arena's roof;

And whereas the Settling Parties deny any liability to Cyro, or to Epstein, in the circumstances of this case;

And whereas the Settling Parties have each delivered a defence to the main action, as well as to the Third Party Claim, in which the Settling Parties deny liability to Cyro, and further, defend against the claims of the main action;

And whereas Clemmensen has pleaded, in paragraph 16 of its Defence to the Third Party claim, that any fault on its part,

> "... would not give rise to any liability on the part of Clemmensen to make contribution, indemnity or relief over to Cyro ... but rather, by reason of Clemmensen's capacity as agent for the Plaintiff, would operate as contributory fault on the part of the Plaintiff and reduce the amount of the Plaintiff's recovery from Cyro. Clemmensen therefore pleads that the Third Party Claim against it is unnecessary and without merit in any event ... "

And whereas Epstein does not agree that any negligence on the part of Clemmensen operates as contributory negligence on Epstein's part, and further denies any contributory negligence on its part;

And whereas Epstein and the Settling Parties are desirous of compromising and resolving the issues as between them, and of streamlining both the main action and third party proceedings so as to contribute to the most expeditious, cost-effective and just resolution of the issues herein, the parties agree as follows:

1. Clemmensen shall pay to Epstein the global sum of _____ inclusive of costs, disbursements and taxes.
2. Kani shall pay to Epstein the global sum of _____ inclusive of costs, disbursements and taxes.
3. This settlement and these payments are not an admission of any fault or neglect on the part of the Settling Parties and is accepted in full satisfaction of Epstein's causes of action, claims or demands of any kind whatsoever in this and in any other claim that Epstein may have against the Settling Parties. The Settling Parties continue to deny that the damages and losses allegedly suffered by Epstein were caused by negligence or breach of duty on their part.
4. Epstein will cause the Statement of Claim in the main action to be amended by adding the following paragraphs:

   X. The Plaintiff has agreed with the Third Parties in the associated Third Party Claim (bearing Court File Number 00-CV-197311A), Clemmensen & Associates Limited ("Clemmensen") and Allen Kani Associates ("Kani"), that the Plaintiffs claims against Cyro in respect of its joint and several liability with Jonkman, and in respect of Cyro's claims over against Clemmensen and Kani, will be limited, to the extent that that the Plaintiff will not claim against Cyro Canada Inc. for any damages, costs and interest which may be proven at trial to be attributable to the several shares of liability of Clemmensen and Kani;

   X. For greater certainty, the Plaintiff shall have no claim directly or indirectly against, and shall seek no recovery from, Clemmensen and Kani, whether directly or indirectly, and the Plaintiff shall limit its claims against Cyro so as to exclude recovery of any claim for damages which might be awarded in favour of Cyro against Clemmensen and Kani by way of third party proceedings or otherwise, or which could otherwise be made against Clemmensen and Kani in the main action, third party claim or any other related proceedings.

   X. The Plaintiff admits that the court at any trial of this action shall have full authority to adjudicate upon the apportionment of liability, if any, between all parties to the main action and any third party actions, including Clemmensen and Rani, whether or not Clemmensen and Kani remain as parties to the Third Party Claim or any related proceeding.
5. Epstein and the Settling Parties will use their best efforts to cause any claims against the Settling Parties to be dismissed forthwith, in order to fully and finally conclude all litigation against the Settling Parties arising from the matters pleaded in this action.

6. Epstein and its heirs, successors, and assigns hereby release and forever discharge the Settling Parties from any and all actions, causes of action, claims and demands related to the matters at issue in the main action and the Third Party Action, howsoever arising, which heretofore may have been or may hereafter be sustained by them and, without limiting the generality of the foregoing, including all expense, loss and injury not now known or anticipated but which may rise arise in the future and all effects and consequences thereof and all claims made or which could have been made in the main action and the Third Party Action.

7. Epstein agrees to indemnify the Settling Parties and to hold them harmless in respect of any claim, crossclaim or third party or similar claim, or any other claim whatsoever made against them that arises from the matters at issue in the main action and the Third Party Action, including any claim for costs which may be awarded in favour of Cyro or any party claiming, or having claimed against, the Settling Parties. Epstein restricts its claims against Cyro for whatever amounts Cyro may be directly liable, that is, Epstein does not claim against Cyro for any damages caused or contributed to by the fault or neglect attributable to the Settling Parties, and as such Cyro cannot be jointly liable with the Settling Parties. This clause means that Cyro Canada Inc. has no basis to seek contribution, indemnity, declaratory relief or otherwise against the Settling Parties as a result of the matters giving rise to this litigation.

8. The parties to this agreement agree that the rights and obligations under this agreement are subject to the Court granting the amendments to the Statement of Claim referred to herein as well as the Settling Parties obtaining an order dismissing the third party claims as against them in advance of the commencement of trial. The parties to this agreement agree to make best efforts to secure these amendments to the Statement of Claim and the dismissal of the third party claims.

9. This agreement shall be disclosed to the Court, if there is a trial in respect of the continuing claims of Epstein, but not the settlement amounts. A complete copy of the agreement, including the settlement amounts, shall be made available to the Court, but in a sealed envelope, to be opened at the discretion of the Court.

10. The parties to this agreement shall mutually seek the approval of the Court to the settlement herein, to the extent approval may be required by law. This Agreement is rendered nugatory and of no effect in the event that the Court declines to give any required approval to this Agreement.

11. This agreement may be executed in separate counterparts, each of which so executed shall constitute an original and all of which together shall constitute one and the same agreement. An executed counterpart delivered by electronic means is hereby deemed to be as effective as an original delivered executed counterpart.

EPSTEIN EQUESTRIAN ENTERPRISES INC.

DATED at Toronto this 6th day of December, 2010

Name: Seymour Epstein Position: Chairman

I have the authority to bind this corporation.

CLEMMENSEN & ASSOCIATES

DATED at Toronto this 7th day of December, 2010.

Name: Bruce Clemmensen Position: President

I have the authority to bind the partnership.

ALLEN KANI ASSOCIATES

DATED at Toronto this 8th day of December, 2010.

Name: Mario Kani

Position: Partner

I have the authority to bind the partnership.

* * * * *

**SCHEDULE "C"**

*1999*

| | | |
|---|---|---|
| Boarding fee | $ | 110,000.00 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 6,600.00 |
| Hillcrest Farm (shipping horses Florida/Toronto) | $ | 6,800.00 |
| Subtotal | $ | 123,400.00 |

*2000*

| | | |
|---|---|---|
| Boarding fee | $ | 110,715.37 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 9,550.00 |
| Ameri-Can (customs charges) | $ | 1,049.18 |

| | | |
|---|---|---|
| Perry Transport Ltd. (shipping horses Toronto/Florida/Toronto) | $ | 10,724.60 |
| Hillcrest Farm (shipping horses Florida/Toronto) | $ | 3,150.00 |
| Subtotal | $ | 135,189.15 |

*2001*

| | | |
|---|---|---|
| Boarding fee | $ | 113,356.87 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 16,450.00 |
| Ameri-Can (customs charges) | $ | 2,955.05 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 2,771.00 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 22,030.50 |
| Subtotal | $ | 157,563.42 |

*2002*

| | | |
|---|---|---|
| Boarding fee | $ | 117,658.75 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 17,272.50 |
| Ameri-Can (customs charges) | $ | 160.17 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 486.01 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 20,000.00 |
| Subtotal | $ | 155,577.43 |

*2003*

| | | |
|---|---|---|
| Boarding fee | $ | 111,476.84 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 20,657.50 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 24,554.74 |

| | | |
|---|---|---|
| Subtotal | $ | 156,689.08 |
| *2004* | | |
| Boarding fee | $ | 100,430.00 |
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 13,950.00 |
| Ameri-Can (customs charges) | $ | 53.92 |
| Russell A. Farrow (U.S.) Inc, (customs charges) | $ | 50.22 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 2,156.95 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 20,429.08 |
| Subtotal | $ | 137,070.17 |
| *2005* | | |
| Boarding fee | $ | 93,107.50 |

| | | |
|---|---|---|
| AFJ Express Ltd. (shipping horses and hay Toronto/Florida) | $ | 39,926.25 |
| Henry Equestrian Insurance Brokers (employee insurance) | $ | 1,869.31 |
| Top Rank Showjumping (shipping horses Toronto/FL/Toronto + airfare) | $ | 14,121.60 |
| Subtotal | $ | 149,024.66 |
| Total | | $1,014,513.90 |

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