

September 18, 2008

*Ensuring Safety through Engineering*

SAFE-T-STRAP  
333 Frankcom Street,  
Ajax, Ontario L1S 1R4

Attn: Mr. Richard Vallance

**Re: Two Workers Attached to a SAFE-T-STRAP Horizontal Static Line.**

Dear Mr. Vallance,

In response to your recent request for an opinion on whether two workers may tie off a travel restraint system to the same SAFE-T-STRAP horizontal static line, please be advised of the following:

A travel restraint system is defined in the Alberta Occupational Health & Safety Code-2006 as such: "travel restraint system" means a type of fall protection system, including guardrails or similar barriers, that prevents a worker from traveling to the edge of a structure or to a work position from which the worker could fall;".

The Safe-T-Strap Horizontal Static Line system and HR-01 end anchors are in general conformity with the applicable sections of part 9 of Alberta Occupational Health and Safety Code-2006 when installed and used as per the engineering specifications and the requirements of OH&S Code.

The Safe-T-Strap HSL was field tested to withstand the dynamic fall arrest forces of a worker and as such is quite capable of resisting the travel restraint force of two workers on the same HSL providing that the length of lanyards are such that a fall cannot occur.

This requires a procedure on site setting the length of the lanyard required, taking into account the built in sag and maximum stretch of the horizontal line.

This requirement must be added to the **SAFE-T-Strap High-Rise Installation Procedure**

Yours truly,

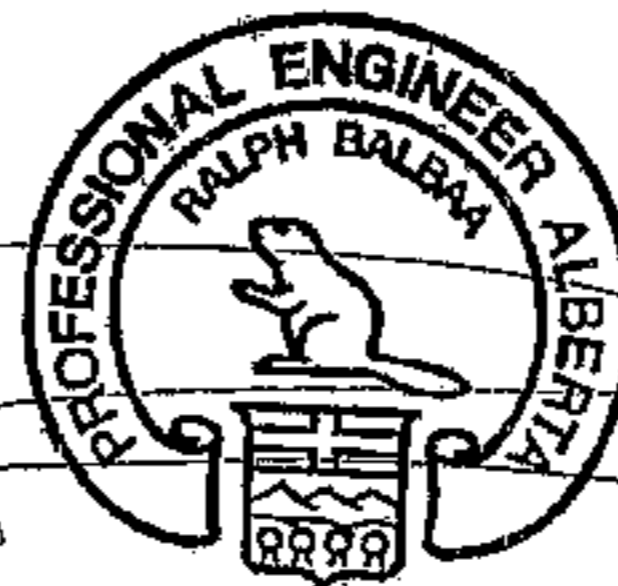
Ralph Balbaa, M.Eng., P.Eng.,  
HITE Engineering Corporation

"Authorized by the Association of  
Professional Engineers of Ontario to  
provide professional engineering services."



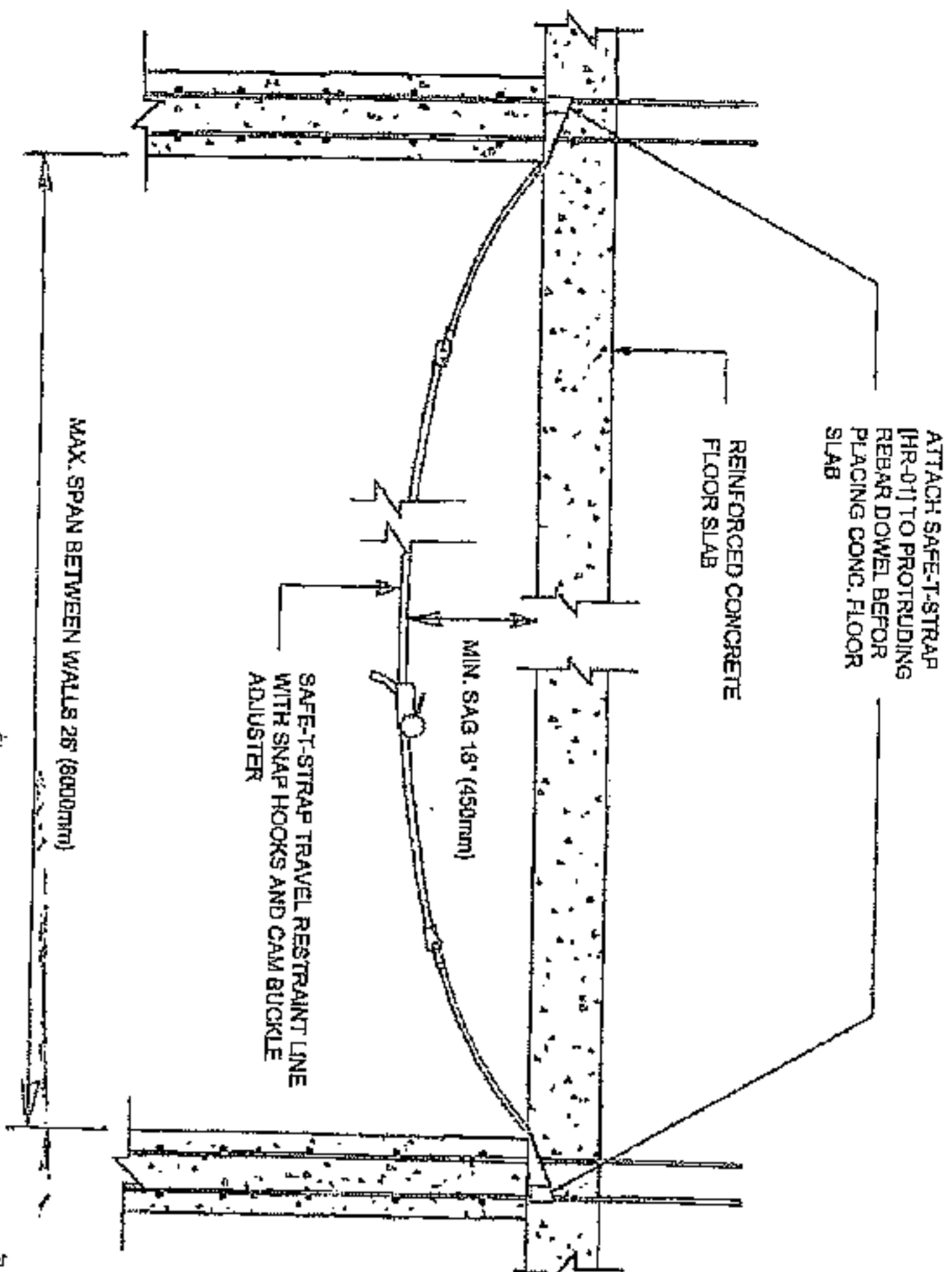
Professional Engineers  
Ontario

[www.hite-engineering.com](http://www.hite-engineering.com)



2660 Meadowvale Blvd., Unit 2  
Mississauga, Ontario L5N 6M6  
Tel: 905-812-3709  
Toll Free: 1-877-360-0015  
Fax: 905-812-3710

**CAUTION: REVIEW ALL MANUFACTURER'S INSTRUCTIONS AND INSTRUCTIONS ON THIS DRAWING BEFORE INSTALLATION AND USE.**



TYPICAL ASSEMBLY OF SAFE-T-STRAP SL-SERIES TRAVEL RESTRAINT SYSTEM

MAX. SPAN BETWEEN WALLS 26' (8000mm)



- SL-SERIES INSTALLATION AND SAFE USE NOTES:**
- 1- ENSURE THAT THE CONCRETE WALL HAS ATTAINED AT LEAST 7 DAYS STRENGTH FOR MIN. 20 MPa (3000 psi) CONCRETE BEFORE ASSEMBLING THE TRAVEL RESTRAINT SYSTEM TO THE SAFE-T-STRAPS.
  - 2- INSPECT THE SAFE-T-STRAP SL-SERIES TRAVEL RESTRAINT SYSTEM FOR ANY SIGNS OF DEFECTS. DO NOT USE IF ANY DEFECTS ARE FOUND, QUARANTINE AND DISPOSE OF DEFECTIVE UNITS.
  - 3- SECURELY ATTACH THE TRAVEL RESTRAINT SYSTEM SELF-LOCKING SNAPS AT EACH END TO THE SAFE-T-STRAPS AS SHOWN IN THE DRAWING.
  - 4- ADJUST TENSION IN THE TRAVEL RESTRAINT SYSTEM SO THAT THE SAG IN THE LINE IS NOT LESS THAN 18" (450mm).
  - 5- INSPECT THE SAFE-T-STRAPS AND THE TRAVEL RESTRAINT SYSTEM TO ENSURE ALL COMPONENTS ARE SECURED IN PLACE.
  - 6- TOTAL LENGTH OF SHOCK ABSORBING LANYARD + SAG IN THE TRAVEL RESTRAINT SYSTEM MUST BE SUCH THAT THE WORKER WILL BE ABLE TO TRAVEL TO A MAXIMUM OF 2' FROM THE UNPROTECTED EDGE.
  - 7- THE TRAVEL RESTRAINT SYSTEM IS RATED FOR MAX 2 WORKERS AT ANY ONE TIME.
- INSPECTION RECOMMENDATIONS:**
- 1- FOLLOW ALL MANUFACTURER'S INSPECTION GUIDELINES BEFORE EACH USE.
  - 2- INSPECT THE SAFE-T-STRAPS FOR ANY SIGNS OF TAMPERING, SERIOUS CORROSION OR DISTRESS.
  - 3- INSPECT THE SELF-LOCKING SNAP HOOKS AND THE CAM BUCKLE OF THE TRAVEL RESTRAINT SYSTEM FOR ANY SIGNS OF TAMPERING, SERIOUS CORROSION OR DISTRESS.
  - 4- INSPECT THE ENTIRE LENGTH OF NYLON WEBBING FOR ANY SIGNS OF EXCESSIVE WEAR, FRAYING, CUTS, OR DISTRESS.
  - 5- REMOVE THE TRAVEL RESTRAINT SYSTEM OR SAFE-T-STRAPS FROM SERVICE UPON DISCOVERY OF ANY DEFECT IN THE SYSTEM AND NOT USE UNTIL EXAMINED AND APPROVED FOR USE BY A PROFESSIONAL ENGINEER.
  - 6- KEEP A WRITTEN LOG OF ALL INSPECTIONS.

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY TO HITE ENGINEERING CORPORATION. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF HITE ENGINEERING CORPORATION, NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.



**HITE Engineering Corp.**  
Consulting Engineers  
2560 Meadowdale Blvd. Unit 2-3  
Mississauga, Ontario L4N 5M6  
T: 905-812-3709 F: 905-812-3710

TYPICAL INSTALLATION OF SAFE-T-STRAP SL-SERIES TRAVEL RESTRAINT SYSTEMS  
SAFE-T-STRAP  
333 FRANKOM STREET, AJAX, ON.

DRAWN BY: D. SHIRLEY  
SCALE: N.T.S.  
DRAWING NO.: 1288

ENGR. APPROV.: S. WAIYADI  
DATE: 07/29/08  
SHEET #: 4 of 4  
REV.: 0

PROJECT NUMBER: 08-6027

**GENERAL NOTES:**

- 1- THE SAFE-T-STRAP TRAVEL RESTRAINT SYSTEM IS DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF ALBERTA OCCUPATIONAL HEALTH AND SAFETY CODE 2006 & APPLICABLE CSA STANDARDS.
- 2- THE SYSTEM MUST BE USED IN ACCORDANCE WITH THE REQUIREMENTS OF OHS CODE 2006.
- 3- A COMPETENT WORKER MUST INSTALL AND INSPECT THE SYSTEM AND ALL OTHER FALL PROTECTION EQUIPMENT TO ENSURE THAT ALL ARE IN A SAFE OPERATIONAL CONDITION. THE WORKER MUST REPORT ANY SIGNS OF DISTRESS AND THE SYSTEM NOT USED UNTIL IT HAS BEEN REPAIRED AND APPROVED FOR USE BY A PROFESSIONAL ENGINEER.
- 4- WHEN APPROACHING WITHIN 2M (6.5') OF AN UNPROTECTED EDGE, A WORKER SHALL BE WEARING A FULL BODY HARNESS EQUIPPED WITH A SHOCK ABSORBING LANYARD AND TIED TO AN ANCHOR OR A LIFELINE SECURED TO A SAFETY ANCHOR OUTSIDE THE 2M (6.5') LIMIT.
- 5- THE FULL BODY HARNESSES AND LANYARDS MUST COMPLY WITH THE REQUIREMENTS OF OSHA/OSHA.
- 6- DEVELOP AN EMERGENCY RESCUE PLAN.
- 7- HITE ENGINEERING CORPORATION MUST BE NOTIFIED OF ANY CHANGES TO OR DEVIATION FROM THIS DRAWING.

**OCCUPATIONAL CLASSIFICATIONS ALLOWED TO USE THIS SYSTEM:**  
ALL OCCUPATIONAL CLASSIFICATIONS WHERE FALL PROTECTION IS REQUIRED. THE SAFE-T-STRAP MUST NOT BE USED IN ENVIRONMENTS WHERE THE SYSTEM COULD COME IN CONTACT WITH CORROSIVE MATERIALS.

August 17, 1998

Mr. Richard Vallance  
Safe-T-Strap  
20 Bermondsy Road,  
Toronto, Ontario  
M4B 1Z5

Dear Mr. Vallance:

As per our conversation on August 4, 1998 regarding the use of your Safe-T-Strap fall protection device in Alberta, I would like to take this opportunity to communicate our conclusion. Our decision comes after careful review of the dynamic and static tests and other relevant product information. Alberta Labour feels that the Safe-T-Strap does comply with the intent of the fall protection regulations, specifically with section 21 (1) of the General Safety Regulation.

Our only concerns were with the assurance that the members onto which your product attach to were adequate and reliable. Your reply was that your product should be attached only to particular members of the respective roof, eg. connection to the main truss on a truss roof or the main ridge beam on a hand-cut or conventional roof. It was also agreed upon that these requirements be made clear in the user manual that accompanies the product. In this way, you will have taken all steps possible to ensure that both users and owners are well informed of the intended uses and limitations of your product. By including sufficient detail of equipment, tools and procedures in the user manual, it will make it easier for owners to comply with section 34 (1)(d) and workers to comply with section 91 (b) of the General Safety Regulation.

This letter confirms your compliance to the intent of the fall protection regulations encompasses the four(4) different configurations of the Safe-T-Strap:

- 1) the safety line strap consisting of 1 -15/16" wide polyester 6000lb capacity webbing, with one end 'double zigzag' stitched creating a loop, with a 3/8" thick 2 1/2" nominal "D" ring on the other end and with a protective polyester sheath that protects the webbing from abrasion and cutting.

Mr. Vallance  
August 17, 1998  
Page 2

- 2) the safety line strap consisting of 1 -15/16" wide polyester 6000lb capacity webbing, with one end folded onto itself and 'double zigzag' stitched, with a 3/8" thick 2 1/2" nominal "D" ring on the other end.
- 3) the safety line strap consisting of 2 lengths of 1 -15/16" wide polyester 6000lb capacity webbing, with a 5000lb 2-5/6" wide cam lock at one end, with a 5000lb test double locking snap hook on the other strap both converging into a 3/8" thick 2 1/2" nominal "D" ring on the other end. (Travel Restraint "Lifeline" System)
- 4) the safety line strap consisting of 1 -15/16" wide polyester 6000lb capacity webbing, with a 3/8" thick 2 1/2" nominal "D" ring on both ends and with an abrasive protector re-enforcing sleeve. (Scaffold Strap)

If you have any questions or comments, please feel free to contact Alberta Labour, Workplace, Health and Safety at 427-6724 or fax us at 427-5698.

Sincerely,



Yung Fah Phang  
Co-op Engineer

cc: Dan Clarke  
Manager, Legislation, Policy and Technical Support Services