Fall Arrest Clearance Example

FFD = L + B – C

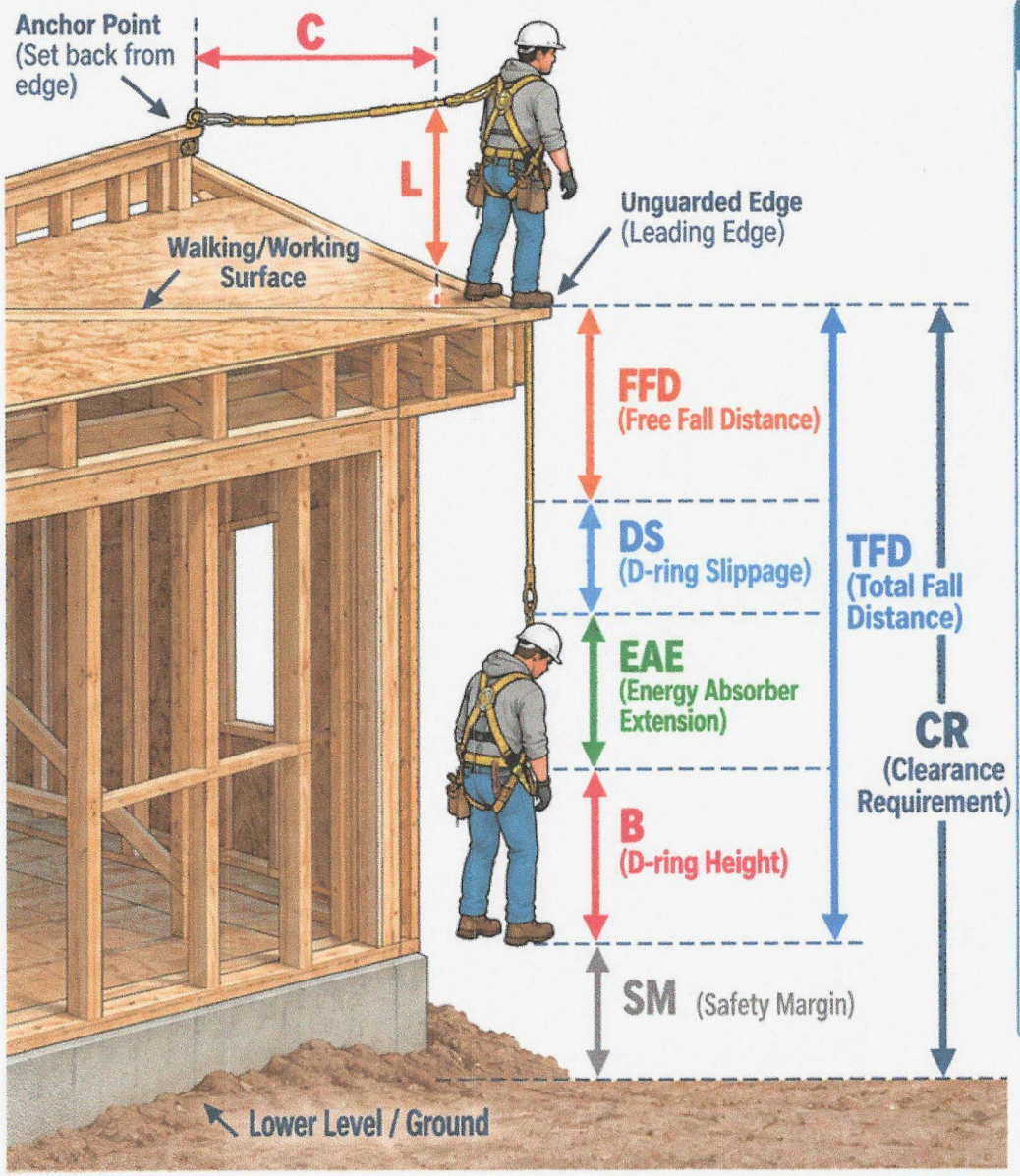
Free Fall Distance = Initial length of lanyard, energy absorber, and connecting hardware + D-ring height – anchor setback

TFD = FFD + DS + EAE

Total Fall Distance = Free Fall Distance + D-ring slippage + Energy Absorber Extension

CR = TFD + B + SM

Clearance Requirement = Total Fall Distance + D-ring height + Safety Margin



Definitions

- **FFD** = Free Fall Distance
- **TFD** = Total Fall Distance
- **CR** = Clearance Requirement
- **L** = Initial length of lanyard, energy absorber, and connecting hardware
- **B** = Height of the D-ring measured from the worker's feet
- **C** = Distance between the anchor point and the unguarded edge
- **EAE** = Energy Absorber Extension
- **DS** = D-ring Slippage
- **SM** = Safety Margin (typically 2 ft. / 0.6 m)

Example – Worker A

L	= 6 ft.
B	= 5 ft.
C	= 8 ft.
EAE	= 4 ft.
DS	= 1 ft.
SM	= 2 ft.

Free Fall Distance

FFD = L + B – C
FFD = 6 ft. + 5 ft. – 8 ft.
FFD = 3 ft.

Total Fall Distance

TFD = FFD + DS + EAE
TFD = 3 ft. + 1 ft. + 4 ft.
TFD = 8 ft.

Clearance Requirement

CR = TFD + B + SM
CR = 8 ft. + 5 ft. + 2 ft.
CR = 15 ft.

CR = 15 ft.
Minimum required clearance.

⚠ Always verify manufacturer instructions and site-specific requirements.

COMPLIANCE AND TEST CERTIFICATION

FROM: CANYON RIGGING 4318-110th Ave SE CALGARY, AB, T2C 0J6 (587) 471-6984	

PO		**Date**	May 7,2025

Product	Anchor Slings
Description:	2”x 3’ - 2”x 3’6” - 2”x 4’ - 2”x 5’ - 2”x 6’ Single Ply Anchor Sling
Material	Polyester

Working Load

1 Person for use as a temporary anchor in a personal fall arrest system.
1,400 lbs WLL (5:1 Safety Factor)
7,000 lbs Breaking Strength Minimum

This product meets the requirements for a temporary anchor used in a personal fall arrest system as per OH&S Part 9 “Fall Protection” Section 152.1(2) as well as CSA Z259. This certification covers the use of 2”x 3’ - 2”x 3’6” - 2”x 4’ - 2”x 5’ - 2”x 6’ Single Ply Polyester Sling as an anchor but it should be used in conjunction with a properly engineered fall restraint/prevention system and plan and needs to be attached to a sufficiently strong restraint capable of withstanding the maximum applied load described in CSA Z259.

19. Temporary Fall Arrest Anchors

(a) The Contractor shall ensure that all members of the Contractor Group make sure that:

(i) trusses are properly braced;

(ii) there is a 38 mm x 140 mm (2" x 6") stringer that connects a minimum of 3 trusses together; however it is best if 5 trusses are connected together (see number 2 on diagram on following page); and

(iii) the sling is wrapped around the 38 mm x 140 mm (2" x 6") stringer as well as the cord (see number 1 on following page).

(b) The Contractor shall ensure that:

(i) the first row of sheeting is safely installed first from inside the trusses (see number 3 on the following page); and

(ii) each worker utilizing a fall protection system has one temporary fall arrest anchor;

(c) Once the above steps are taken and the installation procedure set out by the manufacturer has been followed, the fall arrest anchor is in place and can be used.



Qualico | CGY
37 Quarry Park Blvd SE,
Calgary, AB
T2C 5H9
(403) 253-3311

HS Fall Protection Plan

Information

Sample Fall Protection Plan

Calgary Contractors

Tuesday, November 3rd 2026, 12:27 PM (CST -06:00)

Location

Date	**November 3, 2026**
Address/Jobsite	**37 Quarry Park Blvd**

Worker Information

Worker creating the fall protection plan:	**Meghan Dennehy**
Please input all worker's names (First and Last Name)	**Meghan Dennehy** **Will Fulton** **Kelly Good**

Fall Protection Plan

Fall hazards: Identify all existing and potential fall hazards associated with the worksite

- Carrying items while climbing
- Working at heights for a prolonged period
- Unprotected edges
- Unusual fall hazards
- Tripping hazards (cords, ropes, tools, materials)

Fall Controls to be Used

- Maintain 3 points of contact
- Use mechanical aid to lift materials/tools
- Take regular micro breaks as needed
- Maintain worker's center of balance at center of ladder

- Ensure 100% tie off
- Use edge softeners
- Use appropriate fall protection (with edge protection)

Fall protection system to be used: Identify the fall protection system to be used to protect the worker's from the fall hazards

- Personal fall arrest system (PFAS)
- Lanyard (with shock absorber)
- Harness

Anchors to be used during the work: Identify the anchors both engineered and improvised that workers are to use during the course of the work

- Temporary or Moveable Anchors

A - Length of lanyard being used	= **4**
B - Shock absorber length when deployed	= **2**
C - D-Ring Slippage (standard 1 foot)	= **1**
D - Height of Worker to D-ring on harness (ft)	= **5**
E - Safety Factor (2ft)	= **2**
Add together all measurements (A-E) to determine the clearance distance to prevent a worker from hitting the ground if they fall from heights.	= **14**
Anchor setback (AS) (distance between anchor point and unguarded edge)	= **5**
Work Platform Height (WH)	= **15**
Add together AS and WH to determine the available clearance. if the available clearance is LESS than clearance required, adjust your fall protection system accordingly.	= **20**

Procedures: Identify step by step procedures to assemble, inspect, use, maintain, and dismantle the fall protection system identified above.

1 - Equipment is inspected prior to each use for defects
2 - Put on Harness and conduct a partner check
3 - Connect lanyard to roof anchor strap
4 - Connect lanyard to D-ring
5 - Only once 100% tie off has been achieved will work at heights begin

***If any equipment is found to be damaged during inspection, it will be removed from service immediately.**

Removal of Fall protection equipment will be as follows:
1 - Finish working at heights and prepare to enter roof hatch
2 - Disconnect lanyard from roof anchor strap

3 - Connect to pull away strap on harness until through roof and no longer at height
4 - Disconnect lanyard from harness and from D-ring
5 - Remove harness and follow manufacturer's specs regarding storage

Rescue Plan: Describe the procedures that will be followed if a worker falls and needs to be rescued. Workers are expected to rescue a worker who has fallen and is suspended by a fall protection system and must be trained in rescue procedures. These procedures should be practiced at regular intervals.

In the event of a worker falling from heights and being suspended in a harness the following steps will be taken to rescue and care for the worker:
1. Communicate with fallen worker to determine if they are conscious and the extent of injuries sustained, if applicable.
2. If worker is conscious and physically able, place an extension ladder directly under the worker and secure it in place, have the worker transfer themselves to the ladder and release the tension on their limbs from being in the harness. Have the worker descend the ladder and assess their injuries.
3. If injured or unconscious call 911 and request medical assistance.
4. If worker is unconscious, have rescue team set up a ladder directly next to unconscious worker and connect a second lifeline to the worker's harness and feed the line through the roof anchor D-ring. With a sufficient number of workers lower the worker to the ground in a controlled manner having the worker on the ladder assist with controlling the rope grab to allow the descent.
5. Or, if possible, use saw to cut out wall panel to allow worker to be recovered by pulling worker into building once wall panel has been removed, using a grab pole. Worker's assisting in either scenario must have fall protection equipment on and be tied off.
6. Once worker is on the ground, do not lay the unconscious worker down as it may cause a cardiac event due to the restricted blood flow. Prop worker up or have a chair to set them on. Monitor vitals and communicate with 911 operator on status of injured worker. Wait for EMS to arrive.

Workers must be trained in: The safe use of fall protection system, the procedures they must follow to ensure their personal safety while using the personal fall protection system. The training must include the procedures to assemble, maintain, inspect, use and dissemble the fall protection system in use.

Please upload the fall protection certification for all workers working at heights using the PDF attachment option below or by clicking on the camera icon to the right

PDF Fall Protection Certifications

Meghan Dennehy 3M Train the Trainer Fall Protection 08-24-2026.pdf View


3M
Safety Training
Training Certificate
6418 Fall Protection Authorized Person Comprehensive EN-CA
Trainer Name:
Meghan Dennehy
Trainer Company:
Qualico Developments West Ltd
Expiry Date:
2029-08-24
Course Version:
6418
Certification Details:
6418512742
Applicable Areas:
AB

Workers signing this form acknowledge that they have reviewed and understand this fall protection plan.

Signatures

Meghan Dennehy, *Administrative Assistant – Safety*



November 3rd 2026, 12:27 PM (CST -06:00)

50.9632057, -114.0030821

Kelly Good, *Safety Coordinator | NCSO*



November 3rd 2026, 1:17 PM (CST -06:00)

William Fulton, *Regional Safety Manager*



November 3rd 2026, 2:12 PM (CST -06:00)

50.9630788, -114.0030507