

Kee Guard[®]

SAFETY AT THE HIGHEST LEVEL

Installation Instructions



- NO PENETRATION OF THE ROOF MEMBRANE
- INDEPENDENTLY TESTED, MEETS OR EXCEEDS SAFETY STANDARDS
- NO WELDING, BENDING, OR THREADING OF PIPE

Kee Guard®

Installation Instructions

1. Be sure the locations for all uprights and counter-balances are free from stone and debris. Kee Safety advises that Kee Guard should not be installed during snowy or icy weather unless all snow and ice is cleared first.
2. Position a KGU (Kee Guard Upright). Angle of uprights are adjustable between 90° and 79° from the horizontal. Connect a CB4 PVC counterbalance assembly* (see IMPORTANT NOTE below), to the KGU with the 66" long 1-1/4" pipe and tighten the set screws to 29 lbfft (39 Nm). Install plug on end of tube.
3. Position a KGU 3'-3" from the first upright and connect a CB3 PVC assembly with the 42" long 1-1/4" pipe and tighten the set screws to 29 lbfft (39 Nm).
4. Position a KGU at 8' from the previous upright and connect a CB1 PVC assembly with the 42" long 1-1/4" pipe and tighten the set screws to 29 lbfft (39 Nm).
5. Set the 1-1/2" galvanized pipe into the Kee Klamp Type 135-8 at the top and at the mid section of the uprights to form two rails and tighten the set screws to 22 lbfft (as shown below). Connect the lengths of handrail together using Kee Klamp Type 14-8 (Straight Coupling) and tighten the coupling set screws to 29 lbfft (39 Nm). Be sure to stagger the joints of the horizontal rails. Ideally the Type 14-8 (Straight Coupling) connections on the mid rail and top rail should be offset by 8'.
6. Continue along the roof edge repeating steps 4 & 5.
7. At 90° corners, use Kee Klamp Type 15-8 (90° Elbow). Ensure that an upright is located less than 20" from the corner. The total length between uprights around the corner must be no greater than 8'.

Kee Guard Drawing

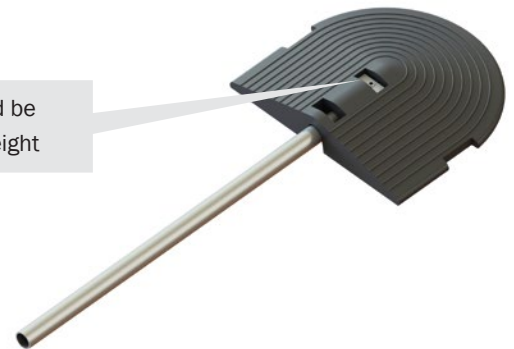


Important Notes

Only (1) 74-7 collare should be used for each (1) 440-7 weight

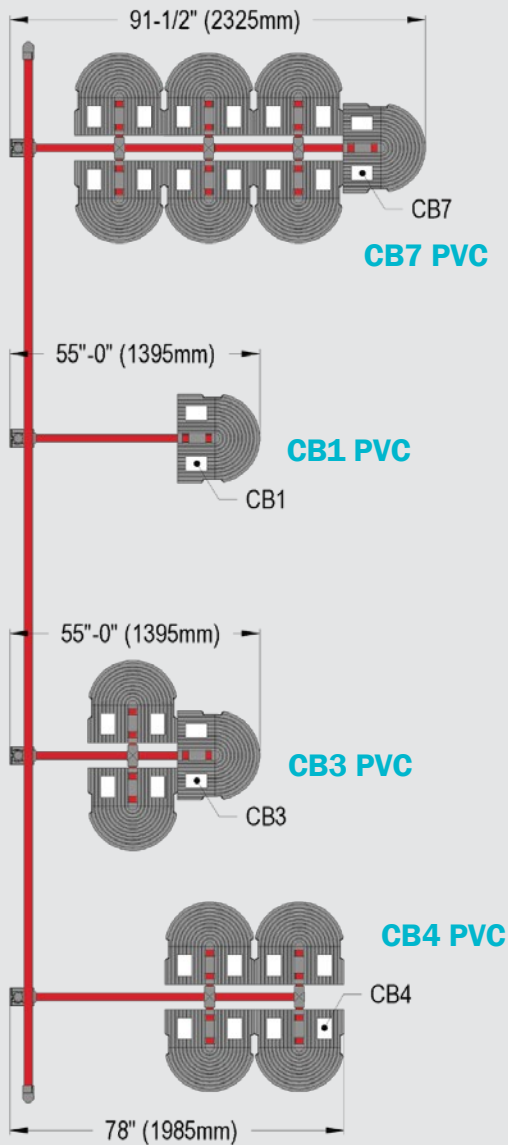
This set-screw torqued to 22 lbfft

This (and all other) set-screws torqued to 29 lbfft



Counterbalance Assembly

CB1 PVC assemblies consist of one counterbalance and one 42" long 1-1/4" pipe. CB3 PVC assemblies consist of three counterbalances and one 42" long 1-1/4" pipe. CB4 PVC assemblies consist of four counterbalances and one 66" long 1-1/4" pipe. CB7 PVC assemblies consist of seven counterbalances and one 66" long pipe.



Corners

At corners greater than or less than 90° where a run is continuous, use Kee Klamp Type BC53-88 (Swivel Elbow). Be sure the spacing is no greater than 8' between the uprights, with one upright being no further than 20" from the corner. See Fig. 1

Termination

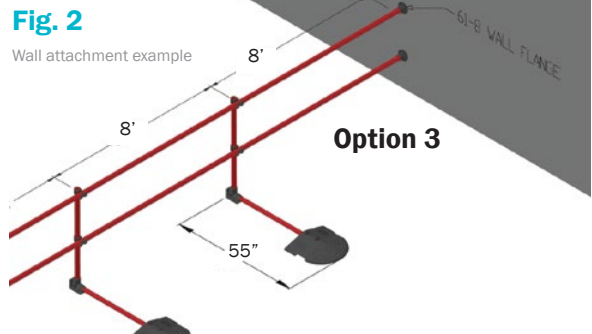
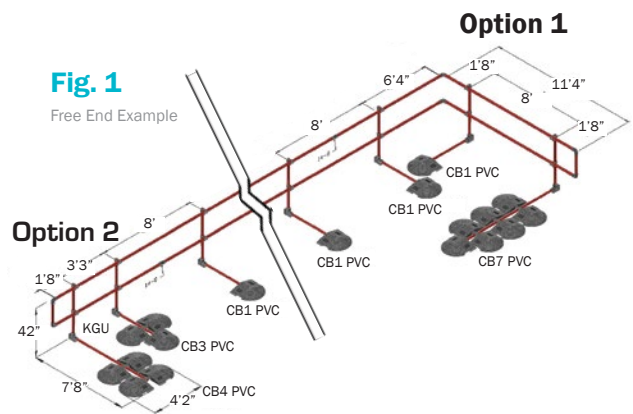
The beginning and end of every continuous run must have one of three possible configurations:

Option 1: (shown in Fig. 1 - Option 1) A CB7 PVC assembly spaced 8' from the following CB1

Option 2: (Shown in Fig. 1 - Option 2) A KGU with a CB4 PVC assembly and a KGU with a CB3 PVC assembly 3' 3" from the CB4 PVC assembly or A KGU with a CB7 PVC assembly unless fastened to a structural member.

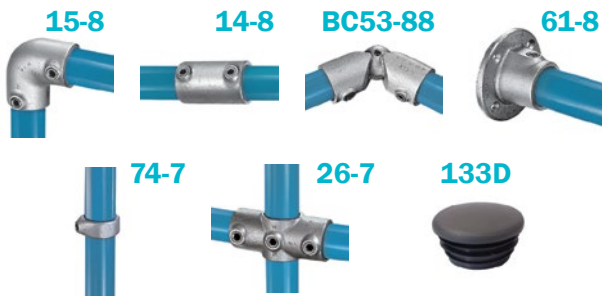
Option 3: (Shown in Fig. 2 - Option 3) Fasten the KeeGuard rail into brickwork or steel using two Kee Klamp Type 61-8 (Wall Flange) OR two Kee Klamp type v (flange). The closest upright should be placed no further than 8' from the wall or steel.

* Be sure to verify with your company representative which ending option your system was provided with. If you purchased shop drawings please follow the layout on the drawings exactly.

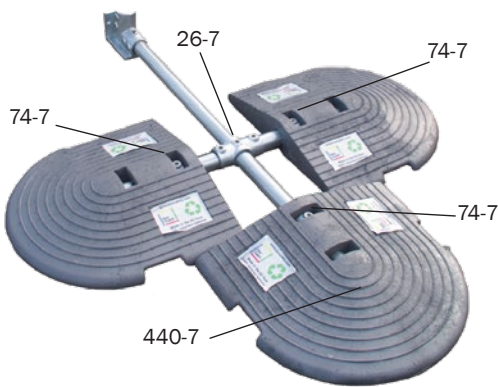


Kee Klamp® Components

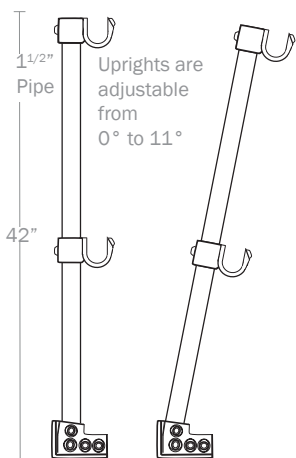
The Kee Klamp safety components below are the most commonly employed in Kee Guard fall protection systems.



Anatomy of the Setup



Kee Guard Components



135-8

An open style crossover component allows for fast installation of horizontal rails.



Toe Board

Toe board option when required is available.

Discover Rooftop Fall Protection Systems and Comprehensive Safety Solutions by Danger Zone Category.

Access Points



Kee Hatch®

A safety access and railing system designed for secure egress/ingress through a dedicated roof hatch. Railing protection supports safety when the hatch is open. Self-closing gate protects workers when entering and exiting the rooftop.

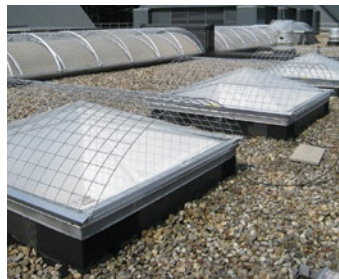
Unprotected Edges



Kee Guard®

On a flat roof, a protected perimeter limits access to the leading edge. Installing a modular, free-standing railing system that does not penetrate the roof membrane provides a safe barrier to the roof edge.

Rooftop Openings



Kee® Cover

Skylights are considered a hole in the roof: an OSHA safety hazard. The unique construction and mounting design allow the Kee Cover to be attached without penetration, maintaining the integrity of the roof and the skylight

Obstacles



Safe Access Platform

When obstacles exist on the rooftop (piping, ventilation systems, partitions between buildings or level changes) SAPs can be custom designed to provide safe access over those hazards.