# Kee Guard®



### **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 KeeGuard should not be installed during snowy or icy weather unless all snow and ice is cleared first.
- 2. Position a KGU (KeeGuard 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 lbf·ft (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 lbf·ft (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 lbf-ft (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 lbf-ft (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  $^{\circ}$  corners, use Kee Klamp Type 15-8 (90  $^{\circ}$  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'.

#### **KeeGuard Drawing**

Just contact us, at Kee Safety for custom configurations and technical assistance toll free at (800) 851 5181.

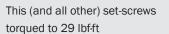


#### **Important Notes**

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

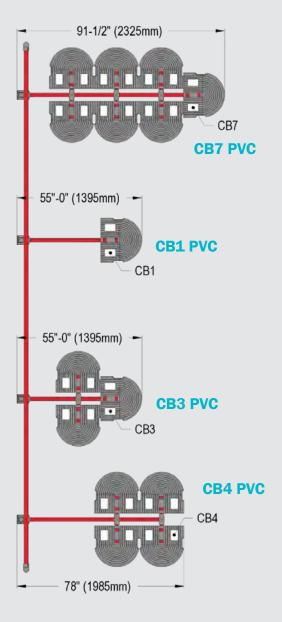


This set-screw torqued to 22 lbf-ft



#### **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  $^{\circ}$  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**

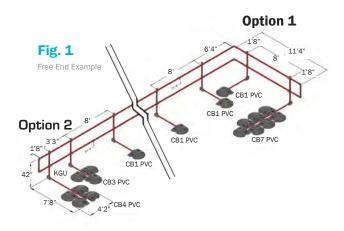
The beginning and end of every continuous run must have one of three possible configurations:

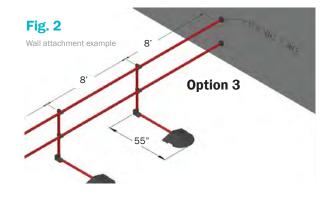
**Option 1:** (shown in Fig. 1 - Option 1) A CB7 PVC assembly spaced 8' from the following CB1

**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.a If you purchased shop drawings please follow the layout on the drawings exactly.



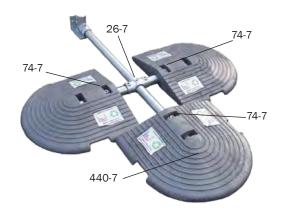


#### **Kee Klamp® Components**

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



#### **Anatomy of the Setup**



#### **Kee Guard Components**

Big Blue



Toll Free: (877) 723 3766 www.SafetyRailSource.com Email: info@safetyrailsource.com

Safety Rail Source LLC 2570 Blvd of the Generals Suite 200 Norristown, PA 19403 Discover Rooftop Fall Protection Systems and Comprehensive Safety Solutions by Danger Zone Category.

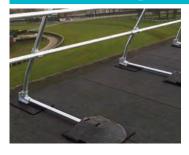
#### **Access Points**



#### 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**



#### **KeeGuard**®

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® Skylight Screens**

Skylights are considered a hole in the roof: an OSHA safety hazard. The unique construction and mounting design allow the Kee Skylight Screen 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 an be custom designed to provide safe access over those hazards.

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