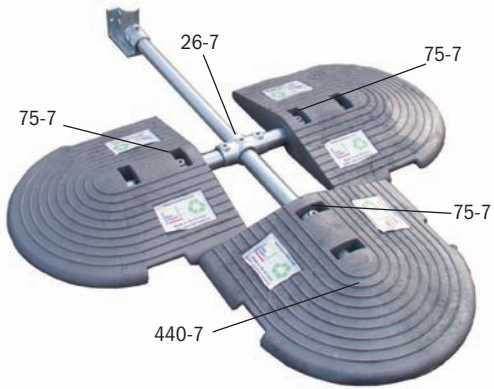


Anatomy of the Setup



OSHA Compliant

The KEE KLAMP safety components, and specially designed KEE GUARD safety components, when used to construct the KEE GUARD railing system, a 42" high guard railing, will meet or exceed the requirements of the OSHA Safety Standard of a single 200 lb. load applied at any location and in any direction along the top of the rail when the correct specification of pipe is used and the correct method of design is employed. The integrity of the structure to which the system may be fixed and the fixings used will need to be inspected to ensure that they are capable of meeting the imposed load requirements.

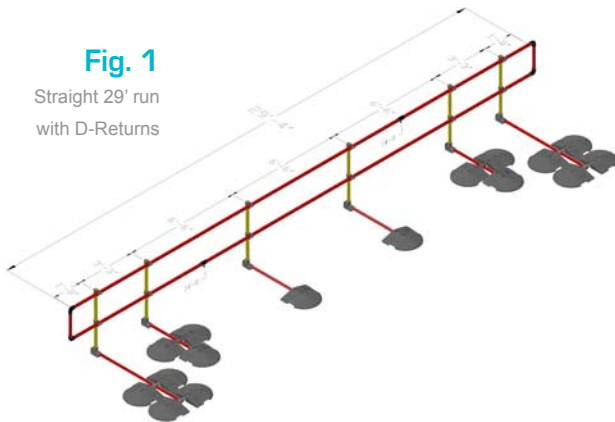
KEE GUARD Drawing

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

- Use CB4 PVC and CB3 PVC assemblies for end uprights not tying into the building
- Dimensions of D-Return and distances between uprights are maximum distances

Fig. 1

Straight 29' run with D>Returns



fall protection



Kee® Anchor

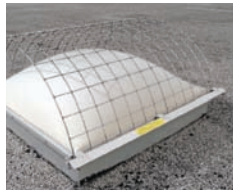
portable, deadweight anchor systems that do not penetrate the roof membrane



Kee® Guard

portable, temporary, free-standing railing system that is fully OSHA compliant

CONTRACTOR



Kee® Guard

screens for curb style, standing seam, and rib/corrugated metal roof skylights

SKYLIGHT SCREENS



Kee® Dome

skylight guardrail system, fits skylights, roof lights, and dome lights with curbs



Kee® Hatch

safety barrier system for safe passage through hatches in rooftops or floors



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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

CSI 077200
 April 2009



Independently tested to
 OSHA Standard 29 CFR 1910.23
 Ontario OHS Act
 Meets ANSI Standards

Installation Instructions

1. Be sure the locations for all uprights and counterbalances 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 (KEEGUARD Upright). Angle of uprights are adjustable between 90° and 79° from the horizontal. Connect a CB4 PVC counterbalance assembly*, (see IMPORTANT NOTE- next column,) to the KGU with the 66" long 1-1/4" pipe and tighten the set screws to 29 lbs/ft (39 Nm).
3. Position a KGU at 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 lbs/ft (39 Nm).
4. Position a KGU at 6' 6" 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 lbs/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. Connect the lengths of handrail together using KEE KLAMP Type 14-8 (Straight Coupling) and tighten the set screws to 29 lbs/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 6' 6".
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 6' 6".

Kee Klamp® Components

The KEE KLAMP safety components below are the most commonly employed in KEEGUARD fall protection systems.

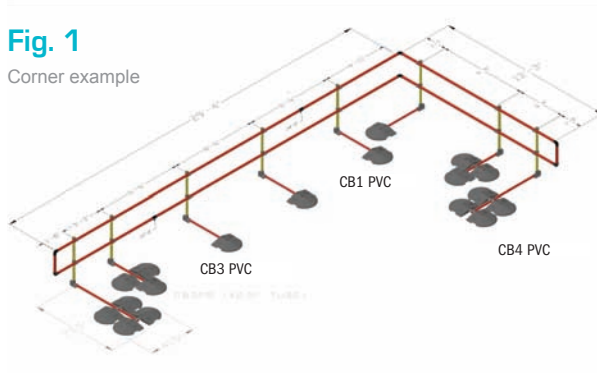


Corners

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 6' 6" between the uprights, with one upright being no further than 20" from the corner. See Fig. 1.

Fig. 1

Corner example



Termination

The beginning and end of every continuous run must have a KGU with a CB4 PVC assembly and a KGU with a CB3 PVC assembly 3' 3" from the CB4 PVC assembly unless fastened to a structural member.

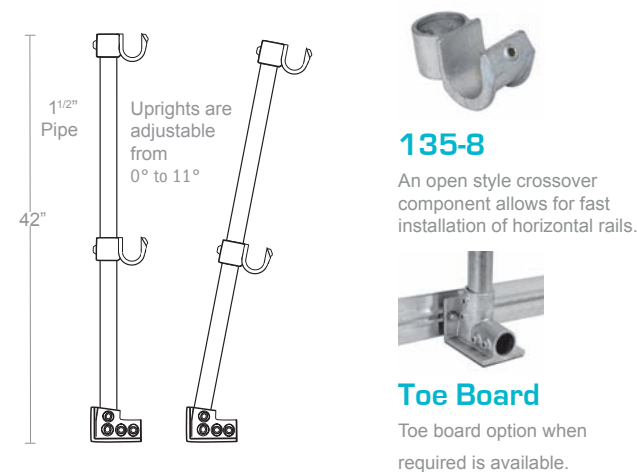
To fasten the KEE GUARD rail into brickwork use two KEE KLAMP Type 61-8 (Wall Flange). The closest upright should be placed no further than 6' 6" from the wall.

To blank off the open ends of pipe, create a D-Return of no greater than 20" using two KEE KLAMP Type 15-8 (90° Elbow).

Alternate method: use two Type 133D (Plastic Plug). Note: If using Type 133D to blank off the ends of the horizontal rails, the plugged ends of the the horizontal rails must be flush with the terminating end upright.

***IMPORTANT NOTE:** Only one (1) KEE KLAMP TYPE 74-7 (Collar) should be used each one (1) KEEGUARD Type 440-7 (PVC Counterbalance). The use of more than one Collar will result in not having enough Collars to complete the job. Only one collar is necessary per each PVC Counterbalance to create a safe and compliant system saving you time and money.

Kee® Guard Components



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.

