

Please Read Disclaimer

Please read all instructions before beginning installation. These guidelines are provided in good faith to help prevent any problems caused by errors in installation. The manufacturer of this product shall not be held responsible for installation actions taken or not taken. There are many details of installation that are assumed to be general construction knowledge to experienced installers; which are not included in these instructions. These installation guidelines are intended to be strictly recommendations and are not to serve as a step-by-step, fail-safe installation checklist. Selection of an experienced installer is the sole responsibility of the project owner and architect.

Protek Systems, Inc. does not accept any responsibility for job failure resulting from or associated with improper site environmental conditions and installation failure due to expansion contraction issues.

Storage:

Products must be stored flat in the original packaging. Do not stand on end or store other material on top of them. Store in a clean dry place where the temperature is maintained above 50°F.

Before Installation:

The temperature of the walls and the rooms should be maintained at a minimum of 70°F for at least 48 hours prior to installation. Allow material and adhesive to acclimate for at least 24 hours at a minimum temperature of 70°F but no more than 80°F before beginning the installation process.

Surface Preparation for Wallcoverings:

Remove any pre-existing wallcovering. For best results walls must be resurfaced if damaged. Remove any rough spots by sanding walls until smooth. Test for paint adhesion. Use a razor to score the surface of a 12" square area in a grid pattern. Try to remove the broken paint film by applying cellophane or masking tape; pull off sharply. If the paint comes off, the wall must be stripped prior to installation. Prime unfinished surfaces with a latex flat primer. Before applying adhesive, the walls and wallcovering sheets must be completely free of grease, dirt, etc. Wipe surfaces with a clean water-dampened rag to remove any dirt or debris.

During Installation:

Maintain a constant temperature and environment while installing. Temperature for the application surface and the room should be maintained at a minimum of 70°F and a maximum of 80°F, with the preferred temperature being 75°F during installation. If relative humidity is greater than 80%, do not install wallcoverings with adhesive because high humidity can significantly lengthen the curing time of adhesives.

After Installation:

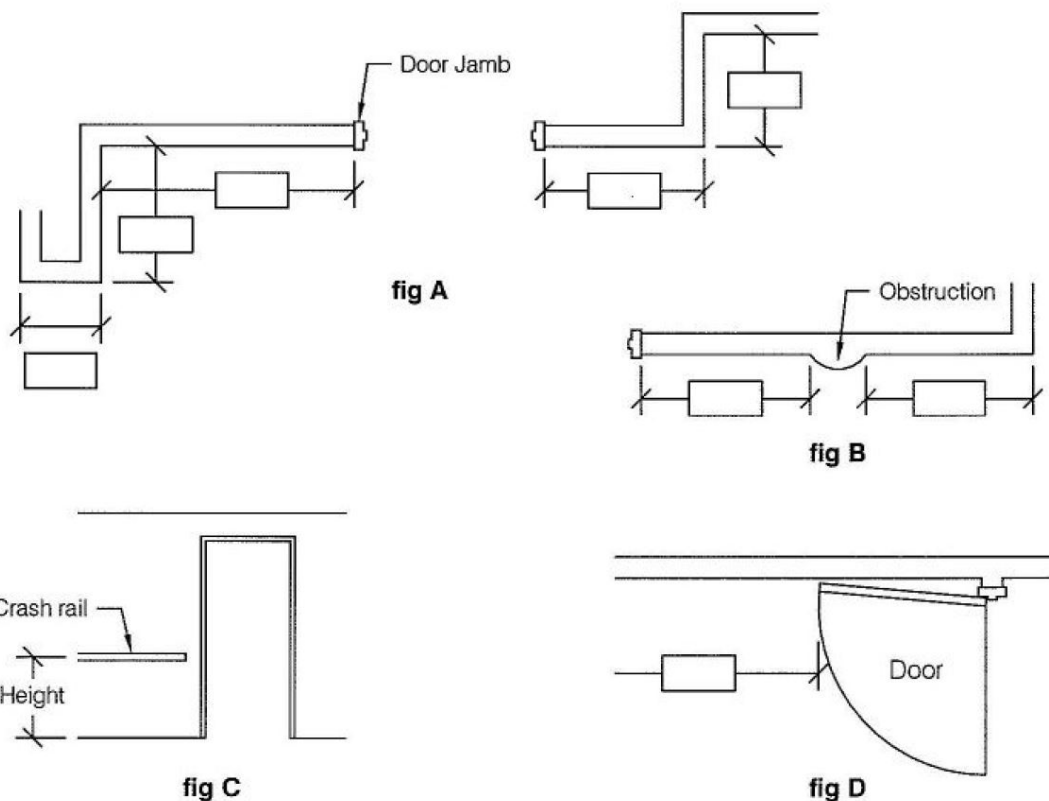
Maintain temperature stability between 70°F and 80°F for 24 to 48 hours after installation.

Reminder:

Proper handling and installation is an important factor in assuring that your facility gains the maximum benefits of the product. Read and follow all the temperature, storage, and handling information completely for optimum final results.

Field Measurement:

- CR-100 series crash rail is manufactured in accordance with field dimensions provided by the customer. All crash rail is pre-cut, pre-formed, and pre-drilled at the factory and should require no further modification. Accuracy of field measurements is crucial to the success of final installation.
- All dimensions must represent actual field conditions from wall to wall, wall to obstruction, or obstruction to obstruction. Do not adjust field measurements for clearance purposes or for any other reason. The factory will adjust dimensions to allow 1" nominal clearance at all wall returns, unless otherwise noted.
- Some dimensional limitations exist. For example, the shortest length of crash rail is limited by the dimensional combination of two brackets and two wall return bends. It is best to supply dimensions for all areas where crash rail is desired and allow the factory to advise if any feasibility issues exist.



Installation:

Determine top of crash rail height and obtain the bracket offset from table in fig 1a. Snap a chalk line at the desired overall height minus the bracket offset, see fig 1b. All crash rail is pre-cut, pre-formed, and pre-drilled at the factory and should require no further modification.

Lay out the crash rail according to the identifier. This identifier is stamped in an upper corner of the rear surface on each section of crash rail, see fig 2b. Remove peel-off protective film from the rear surface of crash rails. **Note:** the rear surface is that surface opposite the countersinking, see fig 2a.

Temporarily install mounting brackets on crash rail using standard hex nuts, see fig 3a. The flange of the bracket with larger access holes must face the rail, see fig 3b. **Note:** standard nuts are used to facilitate temporary installation of mounting brackets. Brackets must be in place in order to locate mounting holes on wall construction. After mounting hole locations are marked, brackets are removed to allow installation of mounting hardware through access holes provided, see fig 3b and step 5. Installer may omit this step if it is desired to mount brackets without use of the clearance holes. If this step is omitted, use lock nuts.

Hold crash rail temporarily in place and mark mounting hole locations on wall construction through holes in bracket, see fig 3a. **Important:** to ensure the best fit at butt joints, begin installation at corners working out toward wall returns. On multi-piece crash rails, fully install each section before beginning installation of adjoining sections.

After marking holes, remove brackets from crash rail and mount brackets to wall with the appropriate hardware according to wall construction. **Important:** use caution when drilling mounting holes in wall so that proper bracket alignment is maintained. To facilitate final assembly of brackets and crash rail, do not fully tighten brackets to wall until crash rail is in place and bolted to all brackets.

Attach crash rail to installed brackets using stainless steel nylon lock nuts and stainless steel flat head machine screws. Tighten lock nuts to 10ft-lbs maximum torque. Tighten fasteners to wall.

Bracket spacing is determined by factory in advance in accordance with field measurements. There will be an additional bracket located at butt joints that do not coincide with typical bracket spacing, see fig 4.

Remove peel-off protective film from front surface of crash rail.

Bracket Offset

Rail Width	Offset
3"	1/4"
4"	1/2"
6"	1/2"

fig 1a

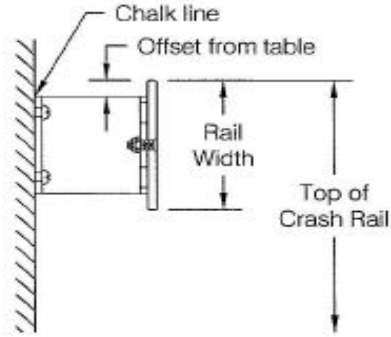


fig 1b

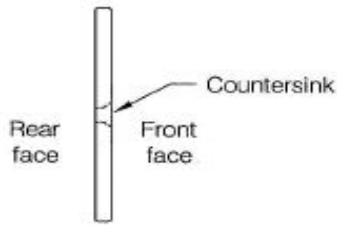


fig 2a

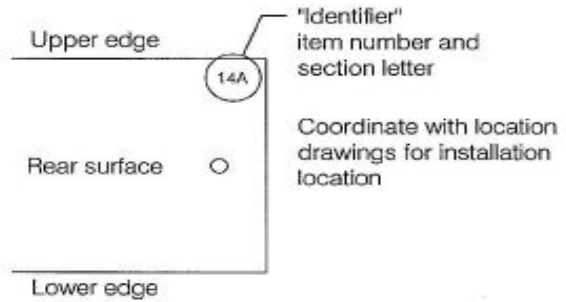


fig 2b

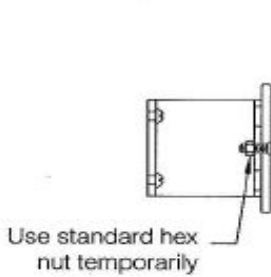


fig 3a

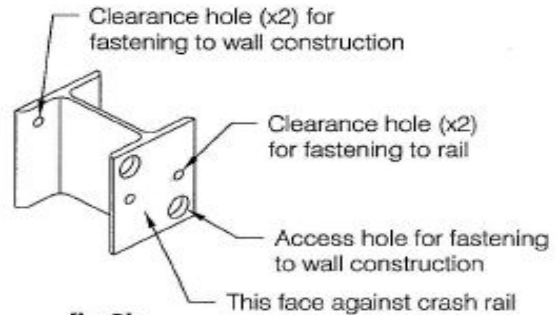


fig 3b

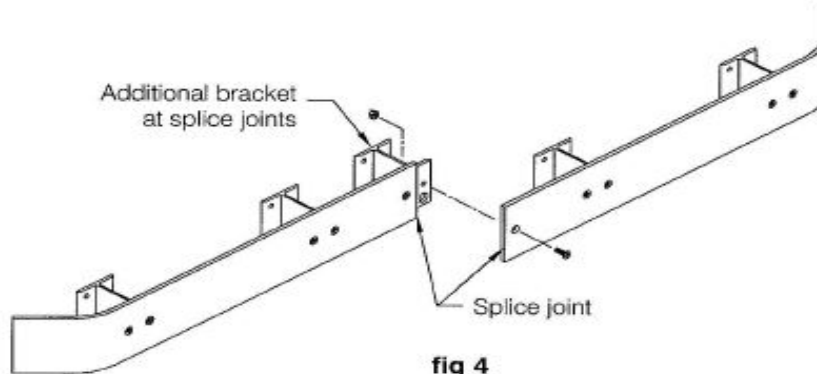


fig 4