

Masonry screws are the recommended direct attachment method for Tectum panels to masonry walls and ceilings. The attachment patterns are shown on Page 2 of this bulletin. Screws with the heads painted to match the natural and white finish are available. Various lengths are available.

The screws have a Phillip's flat head. Screws should be installed so that the face of the screw is flush with the panel face.

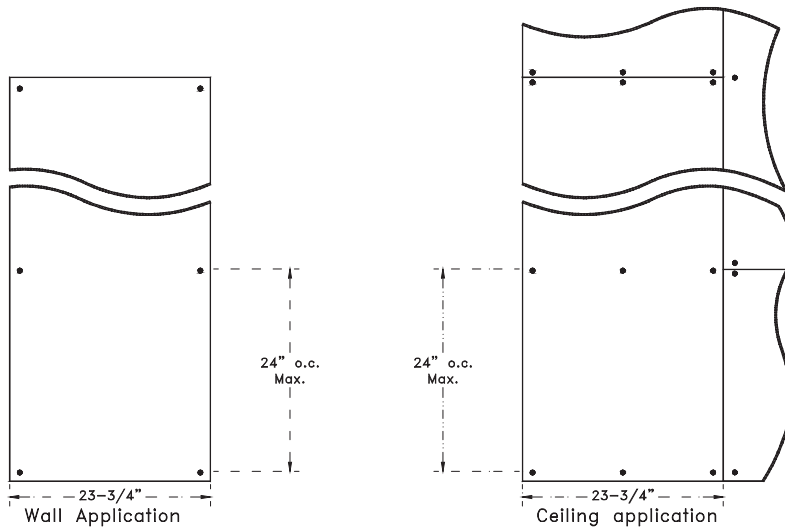
The masonry screw fastening system works on the majority of applications. It is difficult or impossible to use this method with some poured or precast concrete. Concrete with particularly hard aggregate or high density concretes needs to be checked to verify the practicality of using this method of attachment.

When it is not practical to attach panels directly to the concrete, furring strips can be installed and the panels screwed to the furring strips. The attachment of the furring strips is typically accomplished using powder-actuated fasteners. It may also be difficult to use powder-actuated fasteners on some systems where direct attachment is not practical. Proper selection of pin and charge is important. Spacing for screws to furring strips is found in Marketing Bulletin M-40.

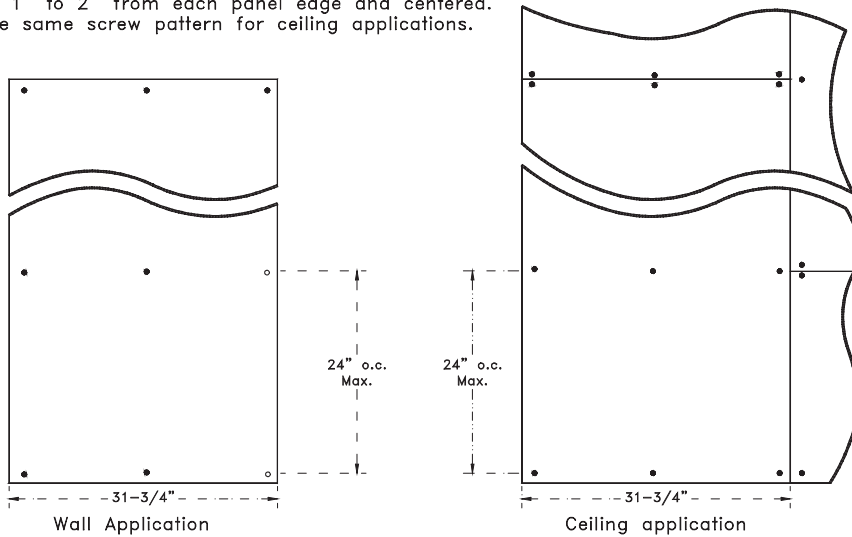
The recommended screw spacing is such that one screw supports one to three square feet of panel. The pull-through resistance of the screw head is adequate. No washers or adhesive application is required. Adhesive used in conjunction with the screws is appropriate in areas where high impact or repeated impact are anticipated. Typically these areas would be gymnasium wall panels less than 10 feet above the floor and gymnasium ceilings where the ceiling is less than 20 feet above the floor.

Typical Attachment

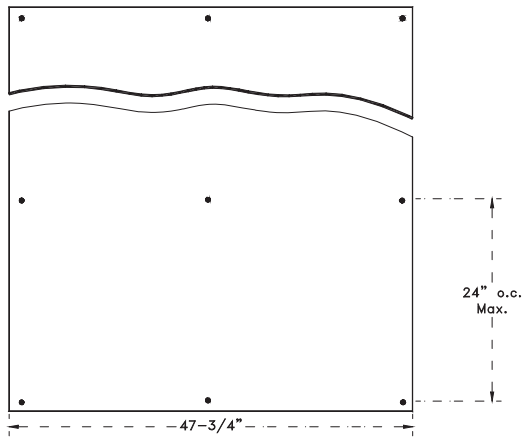
In high impact areas the use of construction adhesive in addition to the screws is good practice. Space the screws 1" to 2" from each panel edge near panel ends and at 24" max. centers along length. On ceiling use 3 screws per panel width for 23-3/4" wide panels.



For wall applications of 31-3/4" Tectum panels, space the screws at 24" o.c. along the length and at the top and bottom of the panel perpendicular to the panel direction. Three screws per panel width are required. Locate the screws 1" to 2" from each panel edge and centered. Use the same screw pattern for ceiling applications.



For wall applications of 47-3/4" Tectum panels, space the screws at 24" o.c. along the length and at the top and bottom of the panel perpendicular to the panel direction. Three screws per pane width are required. Locate the screws 1" to 2" from each panel edge and centered. Tectum panels 47-3/4" wide are not recommended for continuous ceiling applications. When single panel lengths are installed, such as between joists, attach the panels with five screws per panel width.



In high abuse areas, such as gymnasium walls under 10 feet, and gymnasium ceilings under 20 feet, the use of a 3/8" continuous bead of a construction adhesive can be used to supplement the screws.

It is also acceptable to add a screw per furring when repeated impacts to the panels are anticipated.