INSTALLING A DONN® GRID SYSTEM

The appearance of a suspended acoustical ceiling is dependent both on the materials used and on the quality of the installation. USG Boral ME manufactures components to meet ASTM C635, BSEN13964, assuring that the material, structural and quality standards are as prescribed. Installation must meet BS8290, assuring proper level and secure attachment as prescribed. Good construction conditions are very important when successfully installing a suspended ceiling. It is recommended that the temperature and humidity range be 14 – 25°C and max. 75% relative humidity. Store materials in a protected area, store tiles on the job at least 3 days prior to installation.

Step 1
Measuring and planning are key first steps in the installation process. Measurement and placement of the tees will be on center (o.c.), meaning from the center of one to the center of the next. Planning starts with a drawing of the room that shows all walls, including bays, alcoves, beams and stairwells. Note which direction the joists (if any) are running, or if architectural drawings necessitate working in one direction or another. Determine the lines for main runners and cross tees in such a way that the tiles about the wall are at least half a tile (300mm).

Step 2
Mark the desired ceiling height (maintaining at least 70mm clearance below the lowest duct, pipe or beam.) Measure and mark the walls at all corners above the installation level (+ add the height of the wall angle to the desired ceiling height.) Snap a chalk line and test for level. Measuring down from joists or up from the floor is not recommended, since neither may be level. Install wall angle with top edge of angle at the chalk line, spacing appropriate fixings 450mm o.c. or closer. Cut and mitre outside and inside angles at 45°, fitting them snugly together. Alternatively, simply butt angles at corner (as in system illustration).

Step 3
To confirm level, stretch a string until taut along the positions which the main tee will occupy. Inserting a nail between the wall and the wall angle at marked locations serves as a good anchor for this purpose. Stretch another string across the room where the first row of cross tees will be located. This identifies where the first pre-punched slots need to fall. Check to be sure the cross tee string is at 90° to the main tee string via the 3-4-5 method. Install the hangers at 1200mm o.c. above the lines of the main runners. Fix to the structure above using appropriate plugs, screws or other devices.

Step 4
Attach the main runners to the hangers. In each row, trim the main tee so that the cross-tee slot will line up with the cross-tee string. Mount main tees, resting the cut end of the main tee on the wall angle. The cut end of the main runner should be about 5mm away from the wall.

Step 5
Install cross tees, assuring that they are adequately connected to main tees (they “click” in place when properly seated). Where two cross tees intersect in the same slot, insert second cross-tee end to the left of the first. Where a cross-tee is installed without an opposing cross-tee, a nail should be slipped into the opening of the cross-tee clip to maintain the pull-out value for the cross-tee.

Step 6
Lay in panels, beginning at one corner and completing row by row. Tilt each panel up through the opening and lower it to rest squarely on all four tees.

Step 7
Removal as easy as installation. Just grasp the main tee with one thumb under the main tee-cross tee connection and, pushing up with the thumb, give the main tee a quick, short twist. That’s all it takes – no tools needed. The strong clip means that the grid can be reinstalled straightaway with no tearing or bending of the clip.

Step 8
Main tee demounting
Using a straight shearing motion, push with your left hand and pull with your right hand to disconnect the main runner splice. Note: do not twist the splice during the removal procedure.

Other installation tips:
A. Cut tees with aviation snips, first the stem and then the flanges.
B. Cut mineral fiber panels with utility knife and straight edge, cutting the face first. Cut panels should be at least 15mm larger than the opening.
C. To install panels around obstructions, draw their exact locations on the panels and cut out. Then cut the panel in two parts through the largest section of the cut-out to enable fitting.
D. To trim for Shadowline edge, use a utility knife to cut the panel, first at the face, then from the edge, to the same depth as Shadowline. If windows, stairwells, etc., extend above the ceiling plane, build suitable valances and attach wall angle.