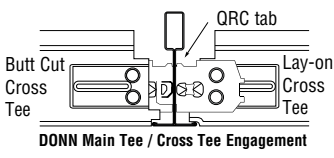
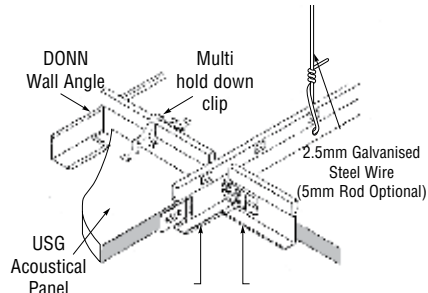


**Suspended ceilings are finished products intended for interior use and should be treated accordingly.**

<b>Delivery, Storage and Handling</b>	<ul style="list-style-type: none"> <li>- All materials shall be delivered in their original, unopened packages and stored for as short a time as possible, in an enclosed shelter providing protection from exposure to the elements and damage by/to other trades. Damaged, deteriorated or obviously faulty material is not to be installed and shall be removed from the premises.</li> <li>- Materials should be handled in such a manner as to prevent racking distortion or physical damage.</li> </ul>
<b>Installation</b>	<ul style="list-style-type: none"> <li>- Ceiling layout should be planned prior to installation to determine grid configuration, direction etc. and to ensure that all fixing points are compatible with structural members and/or other services.</li> <li>- Installation of exposed grid shall not begin until the building is closed in, fully glazed, roof watertight and residual moisture from wet trades such as plaster, concrete and terrazzo has dissipated.</li> <li>- Mechanical and electrical ductwork above the suspension system shall be completed before installation of the suspension system.</li> </ul>
<b>Seismic Bracing Requirements</b>	Consult the <i>USG Seismic Design Guide</i> .
<b>Main Tee</b>	<ul style="list-style-type: none"> <li>- For standard installations Main Tees are spaced at 1200mm centres.</li> <li>- Where heavy ceiling panels are used, close Main Tees in to 600mm centres. Refer <i>Loadings</i> pages 12-15</li> <li>- Main Tee integral splices are to be offset from each other across the ceiling. Where this cannot be avoided, aligned splices shall be mechanically fastened with a pop-rivet, tek screw or similar.</li> </ul>
<b>Cross Tee</b>	<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  <p><b>DONN Main Tee / Cross Tee Engagement</b></p> </div> <div style="flex: 2;"> <ul style="list-style-type: none"> <li>- Cross Tees interlock with opposing Cross Tees through the Main Tee web slots to form the required module.</li> <li>- A positive “click” is heard when the DONN QRC tab correctly engages.</li> <li>- The Cross Tee being installed should be inserted on the <b>left side</b> of the already installed Cross Tee.</li> <li>- Slots are punched along the Main Tee for convenience at 100mm centres for metric systems and 6” for imperial systems.</li> <li>- Main and Cross Tees can be arranged in a variety of module configurations - see <i>Loadings</i> pages 12-15 for standard common layouts.</li> </ul> </div> </div>
<b>Suspension</b>	<ul style="list-style-type: none"> <li>- Main Tee hangers are spaced at 1200mm centres, no more than 600mm from the perimeter Wall Trim or 150mm from the Main Tee splice or 200mm from the Main Tee / Cross Tee joint. For heavier ceilings closer spacings may be required and/or hangers provided through the Cross Tee. Wider spacing may be allowable - see <i>Loadings</i> pages 12-15 or contact your USG Ceiling Specialist.</li> <li>- For Cross Tees not directly attached to walls and where building movement may be anticipated and there is a risk of them losing support, provide extra hangers or suitable restraint to the Cross Tees. (eg ACM7 Seismic Clip)</li> <li>- Where ceilings are back-braced for seismic restraint, do not attach grid to walls. Provide one hanger within 200mm of the end of every Main Tee and Cross Tee, or suitable support to allow for movement. (eg ACM7)</li> </ul> <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  </div> <div style="flex: 2;"> <p><b>Suspension methods include:</b></p> <ul style="list-style-type: none"> <li>- 2.5mm diameter straightened galvanised wire located through the pre punched convenience holes in the Main Tee bulb or web and secured with three tight 360° turns.</li> <li>- 2.5mm wire or 5mm galvanised rod with the DONN CL315 suspension clip over the bulb.</li> <li>- 5mm rod with the CL2424 clip through prepunched hole in the web or bulb of DONN Centricitee or DONN DX grid.</li> <li>- Flat steel strip or Wall Angle secured to the tee web with fasteners the greater of 50kg or ultimate load from AS/NZS 2785.</li> </ul> <ul style="list-style-type: none"> <li>- DONN Direct Fixing Clips <b>between bulb holes only</b> (no less than 10mm).</li> <li>- Hangers are not to be bent or kinked as a means of levelling the grid or for any other reason.</li> <li>- Hangers or bracing are not to be fixed to, or closer than 150mm to plenum building services e.g. ducting, sprinkler pipes.</li> <li>- Fixing of the hanger to the structure above with proprietary fasteners shall be installed in accordance with their manufacturers recommendations, be suitable for the structure material and comply with any required Standards. Such fasteners shall have a design ultimate strength the greater of 50kg (0.5kN) minimum, or load requirements of AS/NZS 2785 Clause 3.2.2 (c.)</li> <li>- Hangers using the CL315 clip shall not vary from the vertical by more than 5°.</li> <li>- Where hangers are splayed up to a maximum of 45° to the vertical, they should always have an equally applied hanger in the opposite direction.</li> <li>- Suspension method and position may be dependant on load requirements. See <i>Step 3</i> tables pages 13 and 15.</li> </ul> </div> </div>

<b>Suspension cont.</b>	<p>Two trapeze wires required to balance the ceiling. - one only <u>will not</u> work</p>
<b>Wall Perimeter</b>	<p>A variety of different Wall Angle profiles are available to suit the Donn Brand systems and designer's requirements. See <i>Wall Angles</i> page 6 for details.</p> <ul style="list-style-type: none"> <li>- Typically fix trim to walls or bulkheads up to 600mm centres maximum.</li> </ul>
<b>Panel Hold Down Clips</b>	<p>Clips may be required for seismic restraint, fire ratings or wind uplift on ceiling panels.</p> <ul style="list-style-type: none"> <li>- Typically install 2 Hold Down Clips (steel or other) per parallel tee (Cross or Main). This will give four points per panel restraint.</li> <li>- Where frequent access in to the plenum is anticipated, some clips can have one side removed to allow clipping one side of the tee but access on the other.</li> <li>- Ensure clips are of a type suitable for DONN DX or DONN Centricitee and for the thickness of acoustical panel being clipped.</li> </ul>
<b>Plenum Depths</b>	<p>Minimum plenum depths for the ease of removal of</p> <ul style="list-style-type: none"> <li>- 600 x 600mm panels = 150mm</li> <li>- 1200 x 600mm panels = 200mm</li> </ul> <p>Where lesser plenum depth is required, particularly under non-continuous structure or services, like joists/purlins or ducts, side loading of ceiling panels can further reduce the depth in these areas to 70mm (subject to panel thickness).</p>
<b>Cutting</b>	<p>DONN Grid and Wall Angle systems are easily cut on site with aviation snips or fine toothed band or hack saws.</p>
<b>Ceiling Acoustics</b>	<p>Acoustical absorption and sound transmission can be controlled to desired levels with the appropriate selection from the extensive range of USG acoustical ceiling panels. See page 22 for an overview selection. Consult your USG Ceiling Specialist for advice on a total acoustical ceiling system.</p>
<b>Fire Rating</b>	<p>Main, Cross Tees and perimeter trims are non-combustible (BS476 Part 4).</p> <p>DONN DXL grid system and appropriate USG Firecode acoustical ceiling panel provide floor/ceilings, roof/ceilings assembly Fire Ratings up to 1 hour. Refer to <i>USG Fire Rated Grid</i> brochure for full details.</p> <p>Please consult USG Interiors for regional compliance and availability.</p>
<b>Lighting/Air Handling</b>	<p>Most standard luminaires, louvres, grills and linear diffusers integrate with the standard module configurations. Refer <i>Lighting Installation</i> pages 16-17 for specific details.</p>
<b>Thermal Properties</b>	<p>DONN suspension systems are unaffected by thermal movement between ambient temperature variations of 10° to 30°C.</p>
<b>Health and Safety</b>	<p>The material composition represents no health hazard. When handling, take care and ensure that safe work practices are adhered to at all times. Some products may have surface treatments and sharp edges/ends. All reasonable care should be taken when handling or installing to avoid any potential injury to self or others. Users should be properly trained and supervised in the use and handling of these materials. Appropriate personal protective equipment should be used when necessary eg: gloves/glasses etc. to avoid any potential injuries.</p>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>- Cleaning - Remove ceiling panels, then perform necessary cleaning of the grid with non-solvent based commercial cleaner.</li> <li>- Painting - Repainting of grid system members should be with a high quality solvent based paint for use over metal surfaces and applied as recommended by the paint manufacturer.</li> <li>- Paint colour <ul style="list-style-type: none"> <li>- Powder coating: Ameron Coatings - Product Code PE522 polyester matt Colour Code 9249AN ANOGRain Pacific White</li> <li>- Wet spray Ameron Coatings - Product Code 640 Amercyl (acrylic lacquer) Colour Code 100322 Pacific White NZ</li> </ul> </li> </ul>
<b>Materials</b>	<p>Main and Cross Tees are a double web design, roll formed from hot dipped galvanised steel with prepainted galvanised steel cap. Cross Tees have a DONN QRC high tensile steel tab clinched to each end, zinc chromate finish.</p>
<b>Partitions</b>	<p>A partitions mass may impact on the installation requirements of a suspended ceiling due to seismic movement. Partitions should not be rigidly fixed to the suspended ceiling where possible, but can be fixed with provision for seismic or other building movement. The Revoc Clip accessory can be used for this. Refer to the <i>USG Seismic Design Guide</i> for full details.</p>