

Understanding design loads & our systems

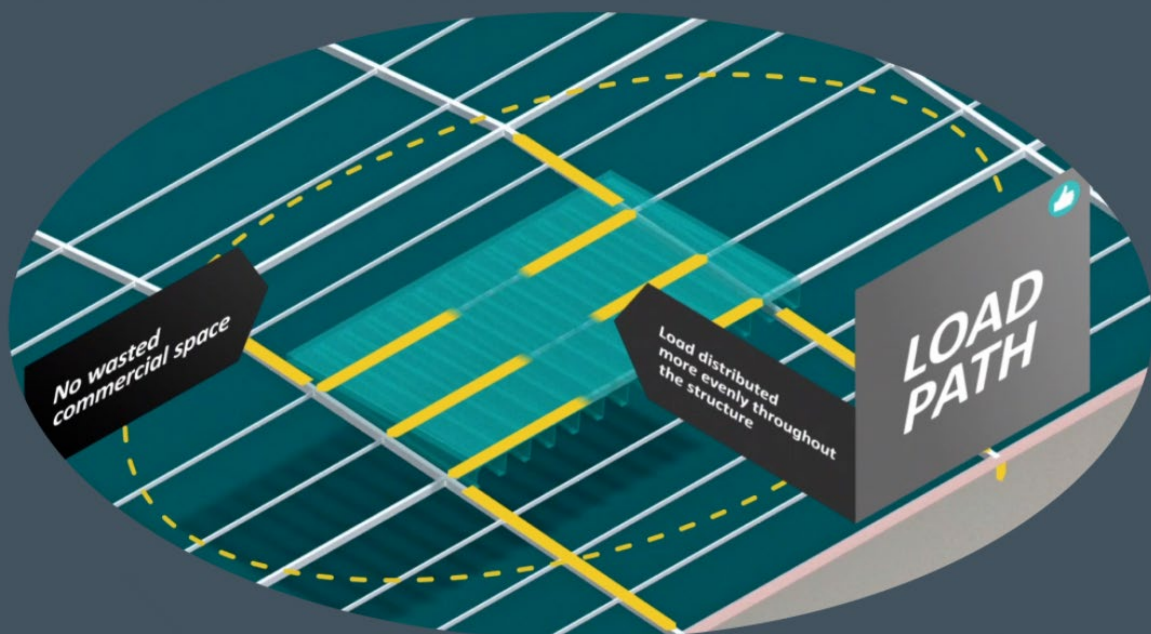


There are multiple factors we consider when engineering one of our HVAC mounting and roof access solutions. At Con-form Group, we have two types HVACR mounting systems which distribute loads in two completely different ways.

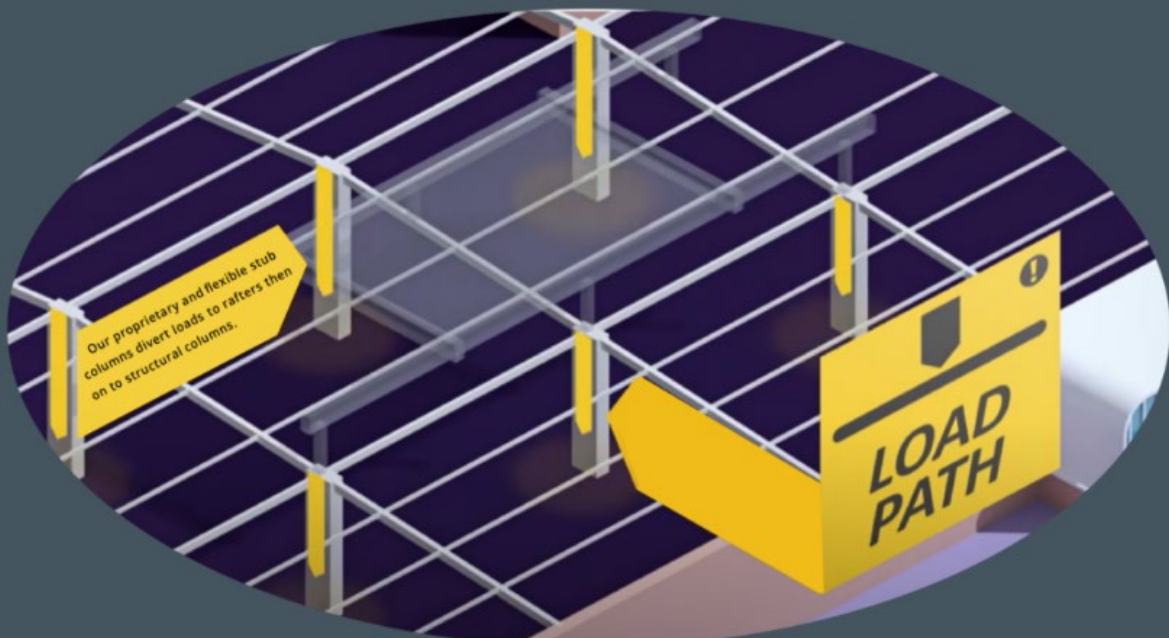
1. **Purlin/Surface Mounted:** Distributes loads evenly via purlins throughout the structure. (Penetration-free. Compliant with AS1170.4 and all relevant Australian Standards).
2. **Rafter Mounted:** Distributes loads through our proprietary stub columns to the rafters. (Ideal for retrofits and when purlin/surface mount is not an option. Also compliant with all relevant Australian Standards.)

Here's a snapshot of how the loads distribute...

Purlin/Surface Mounted



Rafter Mounted



Here are the loads our Engineers consider when developing HVAC mounting, screening (acoustic & architectural) and roof access solutions:

- **Dead Loads:** Action that is likely to act continuously and for which variations in magnitude with time are small. This is basically self weight of the platform including screen and doors
- **Live Loads:** A variable action resulting from the intended use or occupancy of the structure. This is basically equipment weights, maintenance loads from people and tooling. For example:
 - Platform rated to = 2.5 kPa OR 5.0 kPa OR 1.1 kN
 - Walkway = 2.5 kPa OR 1.1 kN
 - Usual roof maintenance = 0.25 kPa OR 1.1 kN
- **Wind Loads:** Action due to wind pressure on a solid or permeable wall AND/OR aerodynamic uplift force (solid floor). For example:
 - Wind region = A or B or C
 - Importance Level = 2
 - Terrain category = 2.5
- **Seismic Loads:** Actions arising in the structure in response to an earthquake. For example:
 - Importance level = 2.0
 - Max. Height of the building = 12m
 - Under above condition, the platform shall be securely fixed to the main building by our standard penetration free clamping system.
 - Structure exceeds those criteria needs to be assessed individually.
- **Snow Loads:** Actions due to snow that needs to be assessed if the platform has a solid floor like checker plate and is located in an alpine area.

For more information on our systems, please don't hesitate to contact our team [here](#) or call us on 1300 882 490 – our Engineers are happy to answer any questions you might have.

For more information on Purlin Mounting systems, [click here](#).

For more information on Rafter Mounted systems, [click here](#).