

## DOW Tuff-R

Featuring the highest thermal insulation value of any foam sheathing currently available, Dow Tuff-R is a closed cell polyisocyanurate (PIR) foam core sandwiched between two durable, aluminium foil exterior facers. The first is a continuous sheet of aluminium foil, the other is aluminium foil-Kraft paper-aluminium foil. Air cannot penetrate the facers, which also minimises water and water vapour intrusion into the polyisocyanurate foam insulation core, and allows the foam R-value to stabilise at a higher value. Tuff-R thermal insulation can be easily applied to a variety of substrates.

Tuff-R thermal insulation is a rigid board, manufactured with a HFC blowing agent, which has zero ozone depletion potential (ODP) than standard CFC/HCFC blowing agents and is Green Star Compliant.



### Features

- High R-Value enhances thermal efficiency
- Facers help reduce air penetration and water vapour intrusion
- Compatible with most exterior siding treatments
- Easy to handle, cut and install
- 15 Year limited thermal warranty

### Applications

- Car park soffits, concrete roofs
- Double brick wall, cavity wall, double cavity precast wall, masonry wall external
- Underside of slab

### Standards

- Green star compliant
- CFC and HCFC Free
- Zero ODP
- LEED
- USGBC

## Technical Data

|                                       |   |
|---------------------------------------|---|
| <b>Product name:</b>                  | <b>Tuff-R</b><br>Polyisocyanurate PIR rigid thermal insulation  |
| <b>Product Description:</b>           | Tuff-R a non-structural rigid thermal insulation board consisting of a polyisocyanurate PIR foam core laminated between smooth, reflective aluminium foil facers on both sides. |
| <b>Surface finish:</b>                | Aluminium foil one face and composite foil Laminate on the other.   |
| <b>Product code:</b>                  | Tuff-R  |
| <b>Colour:</b>                        | Silver foil facers with foam core   |
| <b>Edge treatment:</b>                | Square  |
| <b>Thickness:</b>                     | 12.7 mm to 152.4mm  |
| <b>Width:</b>                         | 1219 mm   |
| <b>Length:</b>                        | 2235 mm   |
| <b>Density:</b>                       | 32 kg/m <sup>3</sup>  |
| <b>Compressive strength:</b>          | 137 kPa (min) @ 10% deformation   |
| <b>Water absorption:</b>              | 0.3%  |
| <b>Blowing agent:</b>                 | HFC   |
| <b>Environmental characteristics:</b> | Green Star Compliant, Zero ODP, CFC/HCFC Free   |

| Thickness to R-Value<br>Tuff-R PIR @ 23.88°C (75°F) aged for 90 days |  |         |
|--|--|---------|
| Thickness<br>Metres  | Lambda/K Value/Thermal<br>Conductivity | R Value |
| 0.0127   | 0.022                                  | 0.58    |
| 0.0254   | 0.022                                  | 1.15    |
| 0.0381   | 0.022                                  | 1.73    |
| 0.0508   | 0.022                                  | 2.31    |
| 0.0635   | 0.022                                  | 2.89    |
| 0.0762   | 0.022                                  | 3.46    |
| 0.0889   | 0.022                                  | 4.04    |
| 0.1016   | 0.022                                  | 4.62    |
| 0.1143   | 0.022                                  | 5.20    |
| 0.1270   | 0.022                                  | 5.77    |
| 0.1397   | 0.022                                  | 6.35    |
| 0.1524   | 0.022                                  | 6.93    |