



# STRAMIT® ROOFING SYSTEMS WITH FM APPROVAL CERTIFICATION



Roofing solutions for buildings where FM Approved® design and certification is specified.



Increasing awareness of loss mitigation and concern over the potential for increasing weather severity have led many organisations to integrate design and construction of key building elements into a loss prevention package.

FM Approvals are at the forefront of providing such packages at a global level. Stramit Building Products now has a choice of roofing systems that are FM Approved® to Approval Standard FM 4471.

Individual products manufactured and supplied by Stramit Building Products that have attained FM Approval when used as part of an approved system are:

- Stramit Speed Deck Ultra® Concealed-Fixed Decking 0.42mm BMT & 0.48mm BMT
- ✓ Stramit Monoclad® Roof Cladding 0.42mm BMT & 0.48mm BMT
- ✓ Stramit Speed Deck Ultra® Fixing Clip
- ✔ Fletcher Insulation Roof Rack® Spacers 75mm & 100mm
- ✓ Self-Threading Fasteners

  Manufactured by ITW Buildex

  AutoTeks® M5.5-14 x 50mm

  RoofZips® M6-11 x 50mm

  Hex-head self-drilling screws No 8-15 x 15mm

  Hex-head self-drilling screws No 12-14 x 30mm

  Hex-head self-drilling screw No 14-10 x 50mm

  with Square-Lok® cyclone assemblies

#### **PERFORMANCE**

The tables in this brochure are derived from FM Global Document 1-28, which sets out the wind pressure, foot traffic, spread of flame, and hail and debris impact resistance requirements for FM Approved® building construction in the regions of Australia noted.

The sheeting options listed in the tables indicate system and span combinations that have been certified by FM Approvals in accordance with Approval Standard FM 4471. Approved options are limited to only and all the products specified in that Approval Standard for the given system and span combination.

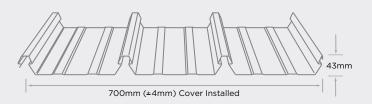
For further details, refer to the website **www.roofnav.com** (registration required) which provides a complimentary tool to determine the wind pressures required for design, as well as information on approved products. A search for Stramit Building Products will retrieve the details for the relevant cases.

## STRAMIT SPEED DECK ULTRA® CONCEALED FIXED DECKING

The approved system consists of Stramit Speed Deck Ultra® concealed fixed decking 700mm effective cover sheets produced from hi-tensile steel with Class AZ coating to AS1397-2011 in plain or pre-painted finish.

The sheet has 3 ribs 233mm apart and must be secured using Stramit Speed Deck Ultra® clips, with each clip fixed to a steel support of minimum 1.5mm thickness using 3 Buildex® 12-14 x 30mm hex-head fasteners.

Fletcher Insulation Roof Rack® refers to both the 75mm and 100mm high spacers, which are fastened using 3 Buildex® 12-14 x 30mm hex-head fasteners to the minimum 1.5mm thick steel supports. The Stramit Speed Deck Ultra® clips are fastened to the Roof Rack® spacers using 3 Buildex® 12-14 x 30mm hex-head fasteners.



**TABLE 1:** STRAMIT SPEED DECK ULTRA® ROOF DECKING SYSTEM

#### **Achieved Ratings for Each Assembly**

BASE METAL THICKNESS (mm)	SUPPORT SPACING (mm)	OPTIONAL COMPONENTS	RATING ACHEIVED
0.48	600	Roof Rack	Class 1-150
0.48	900	Roof Rack	Class 1-150
0.48	1200	Roof Rack	Class 1-90
0.48	1700	Roof Rack	Class 1-75
0.42	600	Roof Rack	Class 1-135
0.42	1200	Roof Rack	Class 1-75

## STRAMIT MONOCLAD® ROOF CLADDING

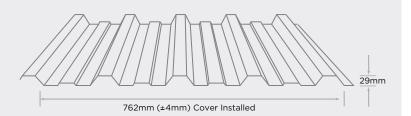
The approved system consists of Stramit Monoclad® roof cladding 762mm effective cover sheets produced from hi-tensile steel with Class AZ coating to AS1397-2011 in plain or pre-painted finish.

The sheet has 4 ribs 190.5mm apart and must be secured using either Buildex Auto Teks® M5.5-14 x 50mm or Buildex Roof Zips® M6-11 x 50mm screws at each crest. Where sidelap fasteners are recommended, they must be Buildex® No 8-15 x 15mm hex-head screws and should be used at every lap joint of sheeting at midspan only.

Cyclone assemblies with FM Approval are Buildex Square-Lok® cyclone assemblies with No 14-10 x 50mm hex head screws. All steel supports should be a minimum of 1.5mm thick.

Fixing positions for Stramit Monoclad® cladding





### **TABLE 2:** STRAMIT MONOCLAD® ROOF CLADDING SYSTEM

#### **Achieved Ratings for Each Assembly**

BASE METAL THICKNESS (mm)	SUPPORT SPACING (mm)	OPTIONAL COMPONENTS	RATING ACHEIVED
0.42	900		Class 1-135
0.42	1700	Sidelap fastener	Class 1-90
0.42	900	Cyclone assemblies	Class 1-210
0.42	1500	Cyclone assemblies & sidelap fasteners	Class 1-150



#### **SUPPLY**

When ordering products for approved systems, it is important that the FM Approval requirement is part of the specification. Stramit Speed Deck Ultra® decking and Stramit Monoclad® roof cladding supplied from Stramit Building Products location in Sydney have been audited and forms part of these approvals. Sheeting must be supplied from the audited location only. Products will be marked to indicate their FM Approved® status.

#### **INSTALLATION**

For correct and detailed installation instructions on each of the Stramit® products, refer to the appropriate technical literature and installation instructions available on the Stramit website, or contact your nearest Stramit Building Products office.



#### **DESIGN PROCEDURE**

Using the Ratings Calculator provided at roofnav.com the required wind uplift rating for the building can be determined.



#### **Step 1 Surface roughness exposure**

Depending on the terrain, choose the appropriate surface roughness exposure category.

#### **Step 2** Local wind speed

A map in RoofNav indicates Australian wind speeds applicable to each region. Input the required wind speed based on this map.

#### Step 3 Windborne debris risk

Choose the appropriate option depending on the risk of windborne debris impacting the roof.

#### **Step 4** Building dimensions

Enter the width, length and height of the building, and the roof slope.

#### **Step 5** Wind uplift ratings

Click on the "Calculate Wind Uplift" button to determine the pressures on the building, and the ratings required for the roof for field, perimeter and corner areas.

#### Step 6 Choose a roof sheeting option

Based on the wind uplift ratings determined in Step 5, a choice can be made of the Stramit® roof sheeting and purlin spacing combination by referring to Tables 1 and 2.

#### **CONTACT US**

STATE	LOCATION	PHONE	FAX
NSW	SYDNEY - 33-83 Quarry Rd, Erskine Park NSW 2759	Ph 02 9834 0909	Fax 02 9834 0988
VIC	MELBOURNE - 2/1464 Ferntree Gully Rd, Knoxfield VIC 3180	Ph 03 9237 6300	Fax 03 9237 6399
QLD	BRISBANE - 57-71 Platinum St, Crestmead QLD 4132	Ph 07 3803 9999	Fax 07 3803 1499
WA	PERTH - 605-615 Bickley Rd, Maddington WA 6109	Ph 08 9493 8800	Fax 08 9493 8899



#### stramit.com.au

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