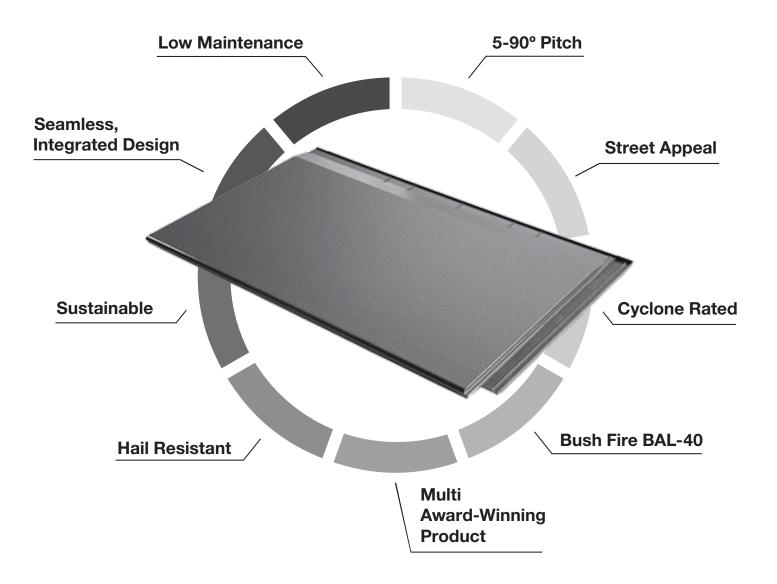


# **Eclipse Roof Tiles**



# The Designer Solar Roof





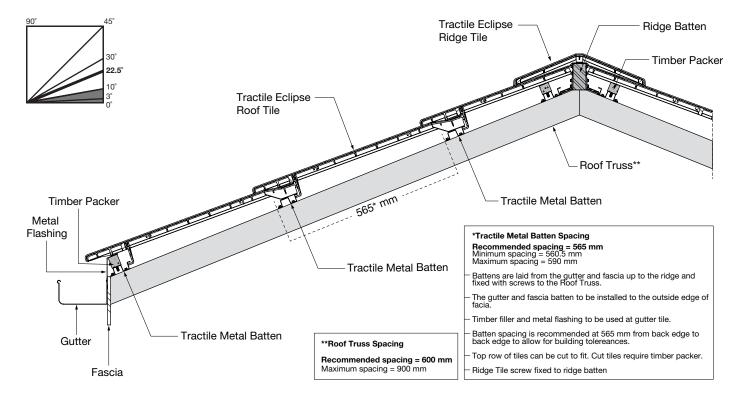


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### Installation

The simple but very effective 'hook & batten' Tractile system utilises specially designed roof tiles, roof battens, ridge cap tiles, hip tiles and barges. Each component part is designed to 'slide-and-lock' into place, ensuring a double action seal that eliminates wind, dust, and water penetration.

- 22.5 degrees is the standard pitch optimal for roofing and solar
- 10 degree minimum pitch as standard Tractile can be installed as wall cladding
- Can be installed lower than 10 degrees



# **Design Features**

#### Large format flat profile tile

This design is a modern interpretation of classic slate tiles. Compared with standard roof tiles, the double height halves the lineal metres of roof battens, and being approximately 8 times larger are faster to install. The lightly textured surface is clear of any screw fixings, provides a natural look and improves surface grip for safety. The low profile tile edge is

### Hook & Batten fixing system

The patented interlocking design provides easy installation with no external screws penetrating the tile surface. In extreme weather, wind loads are more efficiently distributed into the building structure preventing point loading and failures around screws or clips. The hooks are 80% of the width of the tile to provide maximum fixing strength.

- a) Lower hook is the standard hook position for roof applications.
- b) Upper hook is optional for additional fixing strength and wall cladding applications.

#### Tile overlaps

The large overlapping design provides better protection allowing application at lower pitches.

- a) Head and tail lapping zone is 130mm and incorporates unique geometry of a ramp, back wall, offset markings and baffles.
- b) Side lapping zone of the overlock and underlock is 55mm and incorporates vertical ribs to control water ingress. A special channel is provided for locating a silicone bead to seal at low roof pitches.

#### Reinforcing grid

The reinforcing grid is engineered to provide strength to the tile.

#### Support fins

Resting on the metal batten and supporting the head of the tile, the fins provide space for additional materials such as insulation, electrical cables and plumbing pipes to be located above the truss and beneath the tile, shielding them from view and providing protection.

#### Key:

1. Double height & large size 2. Textured surface

3. Low profile tile edge

4. Hook and Batten fixing system

5. Head and tail lap zones 6. Ramp

7. Backwall

8. Offset markers & baffles

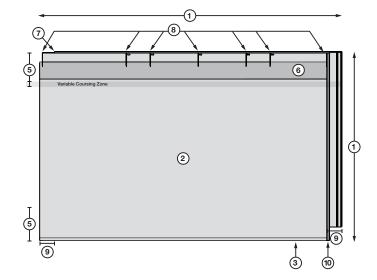
9. Side lapping10. Silicone bead channel

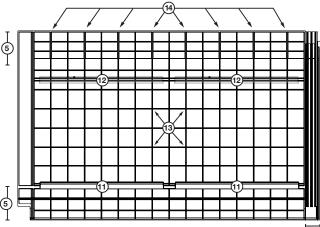
11. Lower hooks

12. Upper hooks

13. Reinforcing grid

14. Support fins

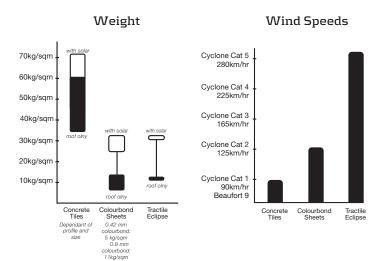




### Performance

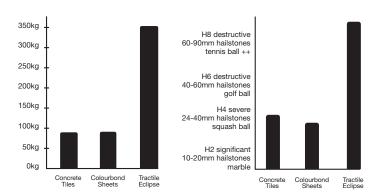
A Tractile roof is engineered to withstand extreme weather conditions offering longevity with low maintenance.

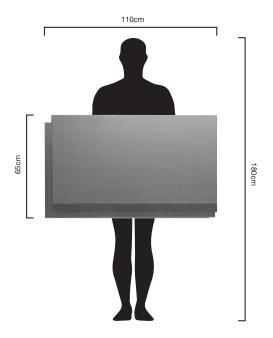
Aside to keeping the weather out, Tractile is rated to BAL40, is salt water resistant, burglar proof and backed by a 30 year warranty making it the highest performance roof available.



#### Point Loading

#### Impact Resistance





# Sustainability

Tractile participated as a case study in the Queensland Government's Embedded Energy of Composites Project. The findings from this Project show that Tractile outperformed both concrete tiles and metal sheet roofing significantly in terms of embodied energy.

MJ: Tractile is 8 times more sustainable than concrete and steel.

Kg of CO2: Tractile is 4.5 times more sustainable than concrete and steel.

Eco-Indicator Points: Tractile is 5 times more sustainable than concrete and steel

Tractile was designed considering a complete cradle-to-cradle lifecycle analysis.

### Insulation

Eclipse solar roof tile ... R-Value 2.00
Eclipse roof tile ... R-Value 0.05
Concrete tile ... R-Value 0.02
Metal roof ... R-Value 0.00

### **Materials**

Tractile roof tiles are made from composite materials (fibre reinforced thermoset resin) that provide the following properties:

- · Lightweight
- · High-strength
- · High impact resistance
- · Fire retardant
- · Non-toxic
- · Electrically non-conductive
- · Resistant to a wide range of chemicals

Tractile is suitable for costal areas within 100m of breaking surf and is rated to Bushfire Alarm Level 40 (BAL40).

### Certifications

Tractile roof cladding is certified to Australian Standards:

- · AS 1170.0
- · AS 4055-2006
- · AS 4100
- · AS/NZS 4600
- · AS/1123 40
- · AS 4256.3-2006
- AS 2049-2002 (R215)AS 2050-2002/Amdt 2-2012
- · NCC 2015
- · BAL-40 Bush Fire

# Roof colours

Tractile is available in a range of standard colours as well as custom colours upon request subject to compatibility. Contact us to discuss your project requirements.



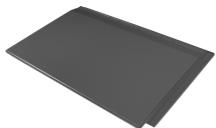
## Tractile Roof Components

**Eclipse Roof Tile** 

**Dimensions Physical** 1100 mm x 690 mm x 7 **Dimensions Exposed** 1050 mm x 565 mm

Coverage

1 tile = 0.593 sqm 1.6 tiles per sqm Weight



### **Eclipse Solar Roof Tile**

**Dimensions Physical** 1100 mm x 690 mm x 71 **Dimensions Exposed** 1050 mm x 565 mm

Coverage

tile = 0.593 sqm 1.6 tiles per sqm Weight

19.56 kg **Photovoltaic Capacity** 

100 watt peak

Water Capacity



Eclipse Thermo Roof Tile

1100 mm x 690 mm x 71 mm **Dimensions Exposed** Coverage
1 tile = 0.593 sqm 1.6 tiles per sqm Weight 19.56 kg

Photovoltaic Capacity

0 watt peak Water Capacity



### Eclipse Ridge Tile

**Dimensions Physical** 1100 mm x 395 mm x 95 mm **Dimensions Exposed** 1050 mm x 395 mm Coverage tile = 0.415 samWeight

### Eclipse Hip Tile

Dimensions Physical 820 mm x 390 mm x 55 mm **Dimensions Exposed** 750 mm x 395 mm Coverage

1 tile = 0.293 sgm Weight

2.24 kg



### **Eclipse Barge Tiles**

**Dimensions Physical** 595 mm x 200 mm x 200 mm **Dimensions Exposed** 570 mm x 200 mm Coverage 1 tile = 0.114 sam Weight 3.00 kg



### Eclipse Ridge End Cap

**Dimensions Physical** 467 mm x 410 mm x 100 mm **Dimensions Exposed** 280 mm x 410 mm Coverage 1 tile = 0.115 sam Weight

### Eclipse Barge End Cap

**Dimensions Physical** 190 mm x 410 mm x 100 mm **Dimensions Exposed** 280 mm x 395 mm Coverage 1 tile = 0.111 sqm Weight 2.20 ka

### **Eclipse Batten**

**Dimensions Physical** 3000 mm x 75 mm x 20 mm Material Thickness 0.75 mm

Truss Span 600 mm - 900 mm Weight

0.8 kg per lineal metre



# Tractile Eclipse Features & Benefits

#### Low Maintenance

- 30 year warranty
- advanced composite materials
- can be walked on safely
- no screw penetrations thanks to patented hook fixing system
- solar tiles can be integrated as opposed to "bolt on
- corrosion resistant making it ideal for coastal applications
- vermin proof
- burglar proof

#### Seamless, Integrated Design

- integrates seamlessly with Tractile Eclipse Solar tiles
- 4 in 1 combination of roof + insulation + electricity + hot water
- no projections above the roof plane
- hidden fixing system
- works with all typical roof structures and designs
- all accompanying electrical and plumbing services incorporated within the tile build up height

#### **Bush Fire BAL-40**

- BAL-40 rating as standard
- non-combustible

#### Sustainable

- 8 x more sustainable than concrete and steel roofing products in terms of energy required to manufacture (MJ)
- lower carbon footprint
- 4.5 x more sustainable than concrete and steel roofing products in terms of carbon emissions (Kg of CO2)
- designed considering a complete cradle to cradle lifecycle analyisis

#### Cyclone Rated

- can withstand Category 5 cyclones
- wind speeds over 280km/h
- maintains water tightness
- fixing hooks are 80% the width of the tile to ensure solid
- must be installed as per Tractile recommendations

#### **Hail Resistant**

- designed for strength
- withstands 65mm hail stones
- outperforms all other roof materials safety in extreme weather events

### Multi Award-Winning Product

- designed and developed in Australia
- winner of numerous design awards including Best Design, Sustainability and Product Category
- patented hook fixing batten system
- large format design
- double height
- exceptional strength
- 130mm tile overlap as standard
- 55mm side lock

#### 5-90° Pitch

- optimum range of 10° to 90°
- 5° to 10° possible using silicone in channels
- less than  $\bar{5}^{\circ}$  with secondary roof system can be used as wall cladding
- most versatile product on the market

### Street Appeal

- suits a wide range of Architectural styles, both modern and traditional
- can be installed "in line", half lap, quarter lap, 1/3rd lap, or as required
- adds value to the property
- no unsightly "bolt on" solar panels
- limitless colour options
- sleek 18mm tile edge profile
- new builds and replacement roofs