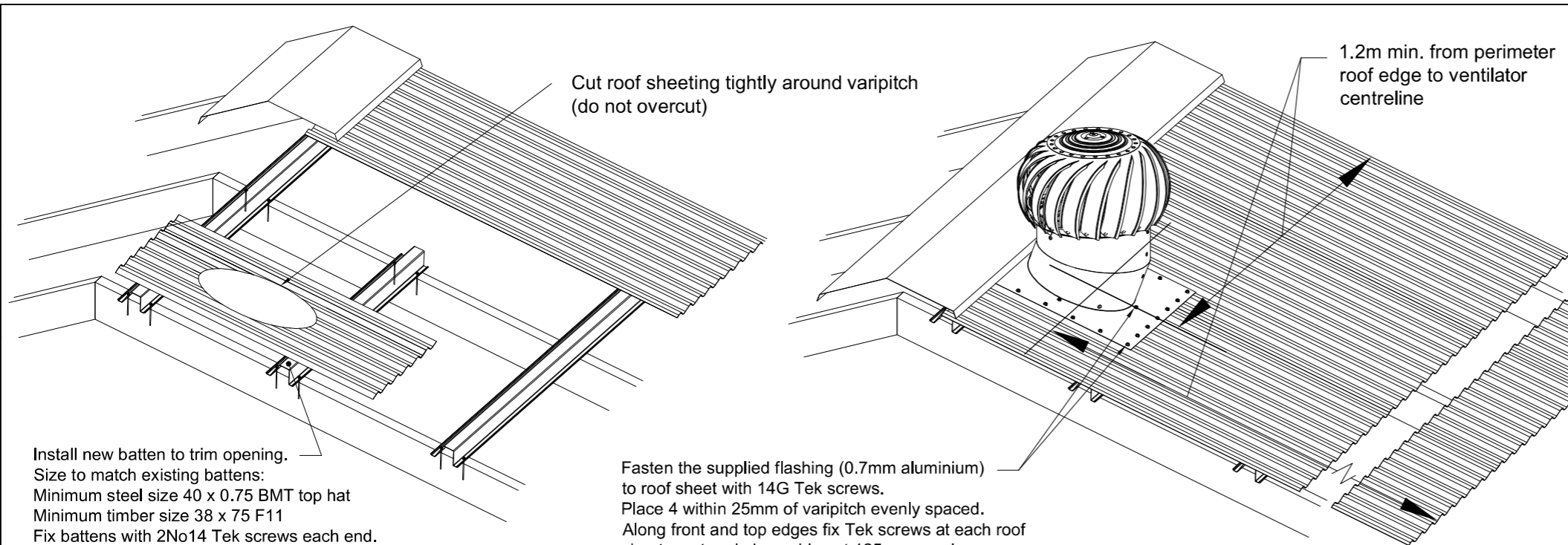


**NORTHERN TERRITORY DEEMED TO COMPLY MANUAL – National Construction Code Volume 2 (Section 3.0.4 Structural resistance of materials in high wind areas)**

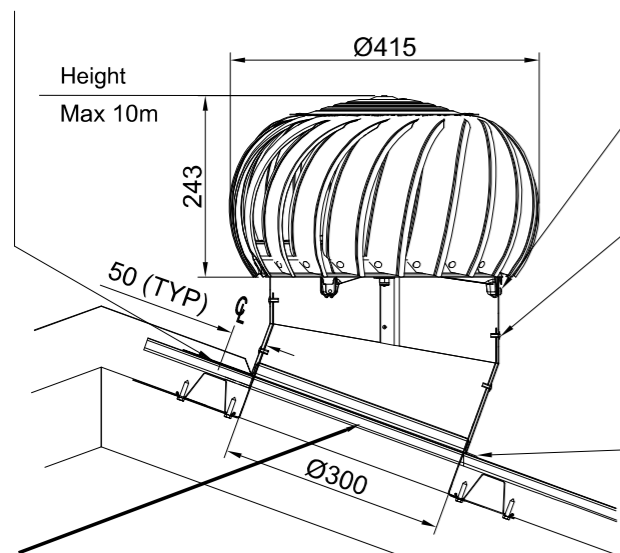
This product has been determined to satisfy NCC Performance Requirement P2.1.1 for structural stability and resistance.



Install new batten to trim opening.  
Size to match existing battens:  
Minimum steel size 40 x 0.75 BMT top hat  
Minimum timber size 38 x 75 F11  
Fix battens with 2No14 Tek screws each end.  
Ensure existing batten is fixed to truss/rafter with two 14G Tek screws (refix if required)

Fasten the supplied flashing (0.7mm aluminium) to roof sheet with 14G Tek screws.  
Place 4 within 25mm of varipitch evenly spaced.  
Along front and top edges fix Tek screws at each roof sheet crest and along sides at 125mm spacings.

Tuck flashing under ridge cap as per standard installation instructions. Ridge flashing to be refixed in accordance with manufacturers specifications (cyclonic)



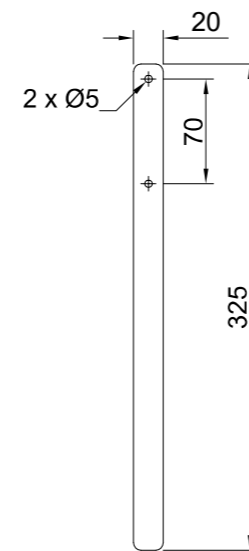
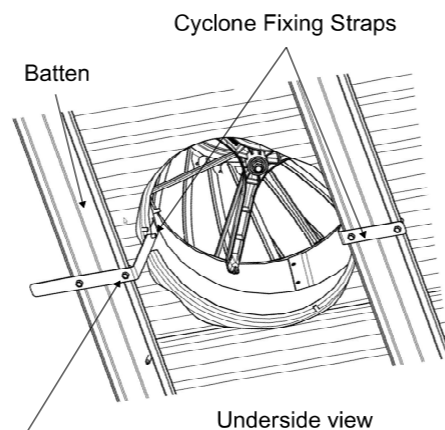
Fasten ventilator to varipitch base with three 12G x 12.5mm self tapping screws supplied.

Fasten varipitch to flashing with three 6-3AS (Ø4.8mm) blind rivets and to cyclone straps with four 6-3AS (Ø4.8mm) blind rivets (not supplied). Seal with silicone if unsealed rivets used.  
The top rivet must be secured into the top half of the varipitch.

Turn up ends of corrugations

If the roof is sarked, cut sarking in a cross and fold back onto itself to give an opening to match the vents throat diameter. Tape the corners to the surrounding sarking with foil tape to prevent them fouling the ventilator.

Fasten cyclone straps to each batten with two 14G Tek screws. Bend straps as required to conform to varipitch and battens.



Cyclone Fixing Strap  
Material: 1.15mm Galvabond G2  
2 required

All screws & teks to be 'Class 4' to AS3566

**Product Name**  
Windmaster Turbine Ventilator (Model A)

**Product Description**  
Rotating Aluminium Wind Driven Roof Ventilator (Ø300mm)

**Manufacturer's Name**  
CSR Bradford  
10 Stanton Road, Seven Hills, NSW, 2147

- Design Criteria**
1. Turbine ventilator successfully passed wind tunnel testing to AS/NZS 4740:2000 without damage to 57m/s.
  2. Ventilator structure assumed to be Importance Level 1 structure with 25 year design life.
  3. Ventilator cannot be used where Vdes exceeds 57m/s as determined by a structural engineer.
  4. Vdes = 57m/s

VENTILATOR USE TABLE

Wind Region	Terrain Category	Topographic Classification									
		T0			T1			T2			
		FS	PS	NS	FS	PS	NS	FS	PS	NS	
A	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
B	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
C	3	✓	✓(10-50)	✓(20-50)	✓(5-50)	✓(30-50)	✓	✓(25-50)	✓	✓	✓
	2.5	✓	✓(25-50)	✓(35-50)	✓(20-50)	✓(40-50)	✓	✓(35-50)	✓	✓	✓
	2	✓	✓(10-50)	✓(35-50)	✓(45-50)	✓(30-50)	✓	✓	✓	✓	✓
	1	✓	✓(30-50)	✓	✓	✓	✓	✓	✓	✓	✓

NOTES:  
FS = Full Shielding  
PS = Partial Shielding  
NS = No Shielding.  
(x-50) = Distance in km from the smoothed boundary (coastline or higher wind region).  
'Terrain Category' - refer AS 4055:2021 page 11  
'Topographic Classification' - refer AS 4055:2021 page 12  
'Shielding' - refer AS 4055:2021 page 13

- Limitations**
1. Ventilator Use Table is only applicable to residential properties that comply with AS 4055:2021.
  2. Ventilator suitable for Custom Orb type roofs only.
  3. Ventilator suitable for roof systems consisting of cyclonically rated roof sheeting, battens/purlins, and fixings only.
  4. Ventilator suitable for roof pitches 5 to 35 degrees.
  5. Ventilator to be a minimum 1.2m from a perimeter roof edge.
  6. Ventilator cannot be used in Wind Region D.
  7. Ventilator suitable only for Topographic Classifications T0, T1, and T2 as shown by Ventilator Use Table.

**Accepted for inclusion in Deemed to Comply Manual**

DTCM drawing number: **M/350/01a**

Chairperson Signature:

Chairperson Name: **Paul Nowland**

Date of Approval: **25/07/2022** Expiry Date: **25/07/2027**

Notes covering basis of DTC (Relevant test reports etc)  
Wind Tunnel Test to AS/NZS 4740 carried out at Delft University of Technology, the Netherlands.  
Test Report TUD-LR-CR-AE-2010-1 (Model A - Aluminum) dated 12 March 2010  
Instructions for cutting the hole in the roof sheet and weather sealing the ventilator are provided in the standard 'Residential Turbine Ventilator' installation instruction supplied with the vent.  
This DTC instruction must be completely followed in addition to the standard instruction to satisfy DTC requirements.

**Checking Engineer**  
Name: Bill Hutton  
Registration Number: CPEng, RPEQ No. 13047  
Date: 20/07/2022  
Signature:   
Must be an Australian registered structural engineer

**Certifying Engineer**  
Name: Liam Kenny  
NT Registration Number: 14004ES  
Date: 20/07/2022  
Signature:   
Must be a registered structural engineer in the Northern Territory