

E-STACK ROOF TERMINALS

THE E-STACK ROOF TERMINATION UNITS ARE DESIGNED TO WORK
IN CONJUNCTION WITH THE E-STACK R AND S SERIES
NATURAL VENTILATION SYSTEMS.



BENEFITS

These roof mounted termination units are available for use with both the e-stack R and S-series Natural Ventilation systems. The units are designed to provide an attractive and practical external means of ventilation via a shaft connected to the room areas below.

The ventilation shaft from the room to the weatherproof penthouse louvre is to be provided by others and is a builders work requirement.

The penthouse louvre units shall incorporate weatherproof louvres with the required aerodynamic effective area to ventilate the rooms and incorporate the following benefits:

- Manufactured from aluminium
- Powder coated to high quality finish
- Louvre blades designed for weatherproofing; double and triple bladed systems available
- Roof terminals sized to individual application and minimum free area requirements
- Colour: RAL7038 (Agate Grey) as standard.

Other standard RAL colours on request (may incur an additional cost).

WEATHER PERFORMANCE

Louvre blades' weather performance tested in simulated rainfall of 75 litres/hr (equivalent to around 3 inches rainfall in an hour) at a wind speed of 13m/s (about 30mph) towards the louvre blades.

The amount of rain which gets through the louvre is measured with no flow through the louvre, and then with various amounts of air inflow through the louvre blades (measured as design air inlet velocities.) The e-stack system operates with air inlet velocities typically under 1m/s when it acts as an air inflow pathway. Water repellent efficiency is described as a percentage of the incident rainfall.

Weather performance specifications are as follows for our double-bladed and triple-bladed louvre systems with bird screen fitted.

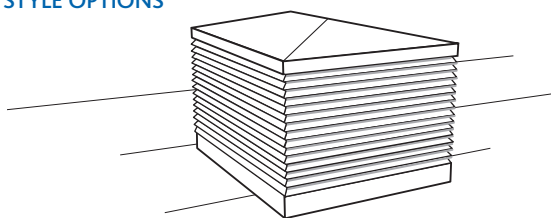
Weather Performance – Water Repellent Efficiency (to nearest 0.1%)

Number of Blades	Design Air Inlet Velocity, v					
	v = 0 m/s	v = 0.5 m/s	v = 1.0 m/s	v = 1.5 m/s	v = 2.0 m/s	v = 2.5 m/s
2	99.9%	99.9%	98.9%	Class C (<95%)	Class C (<95%)	Class C (<95%)
3	100.0%	100.0%	100.0%	100.0%	100.0%	Class C (<95%)

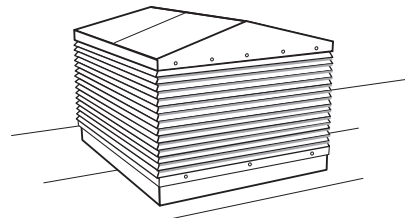
WARRANTY

The Termination units have a 3 year warranty.

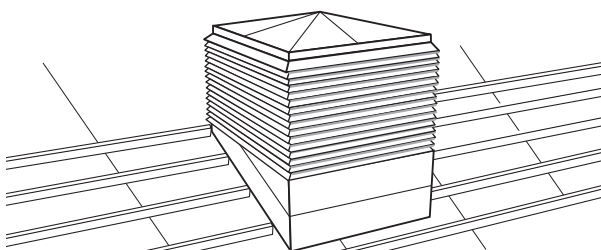
STYLE OPTIONS



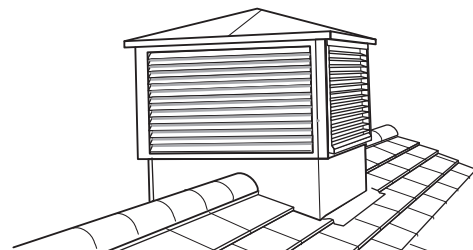
Hipped Roof Terminal with mitred corners.



Gabled Roof Terminal with mitred corners.

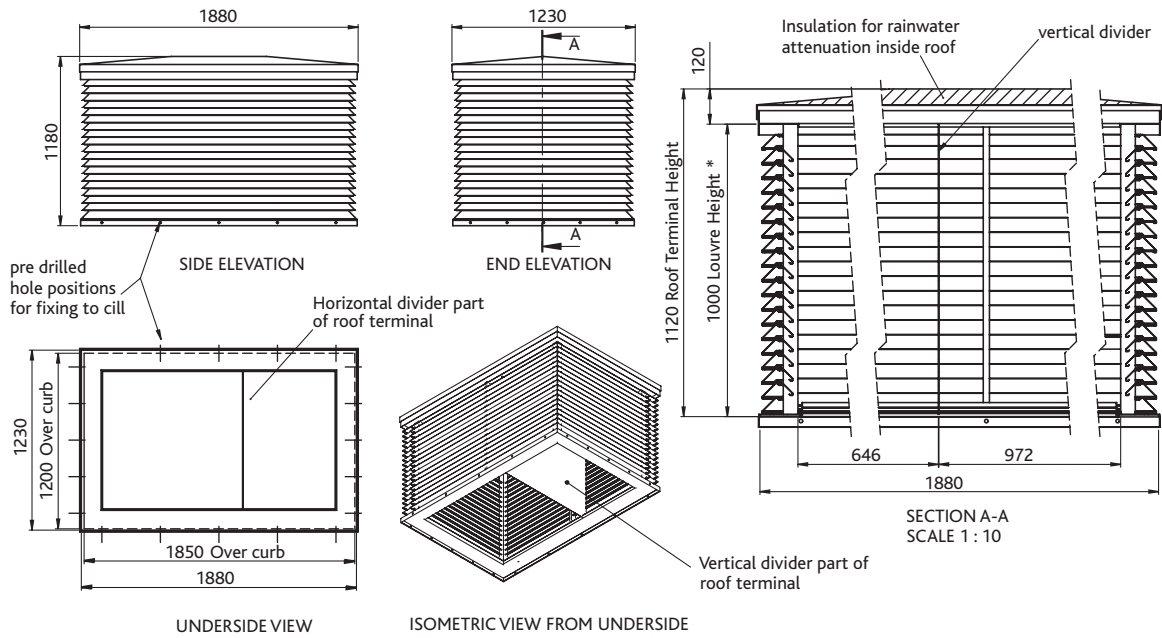


Pyramidal Roof Terminal with mitred corners.



Pyramidal Roof Terminal with corner post.

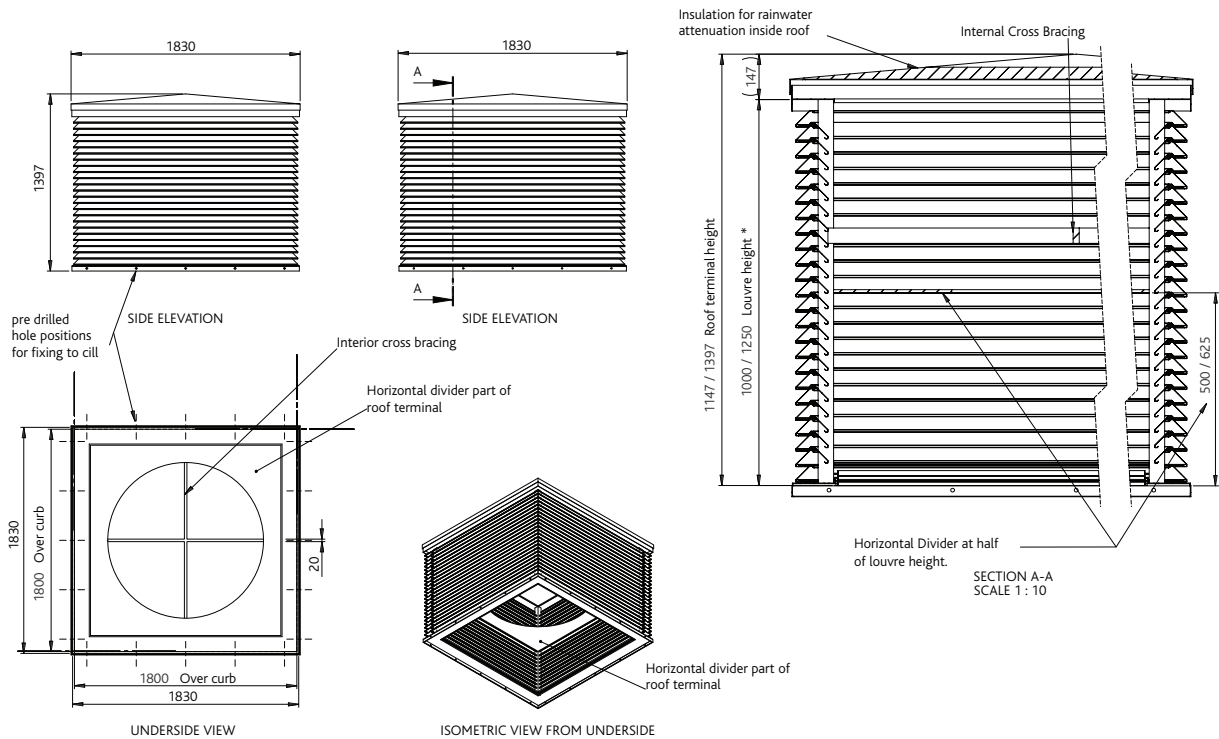
DIMENSIONS OF R-SERIES ROOF TERMINALS



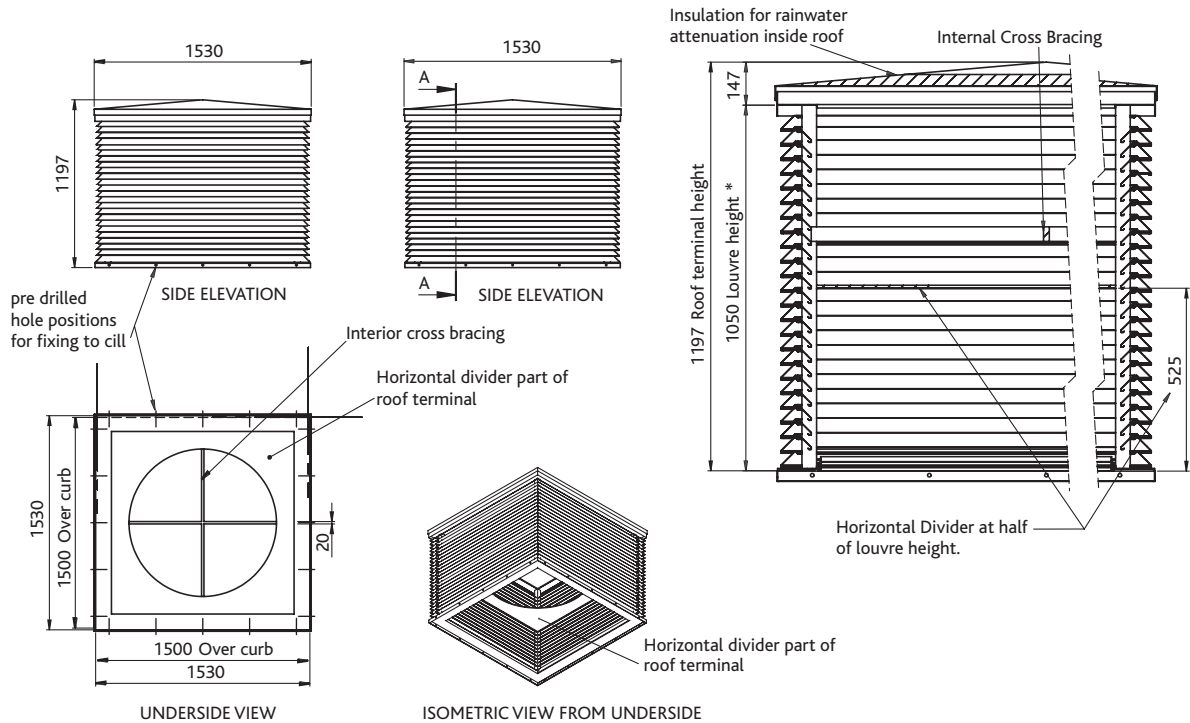
CODING & UNIT SIZES FOR R-SERIES

Code	Description	Size of unit
NVR-T600	Roof Terminal for R-Series	600mm high
NVR-T800	Roof Terminal for R-Series	800mm high
NVR-T1000	Roof Terminal for R-Series	1000mm high

DIMENSIONS OF S-SERIES 1500 ROOF TERMINALS



DIMENSIONS OF S-SERIES 1200 ROOF TERMINALS



CODING & UNIT SIZES FOR S-SERIES

Code	Description	Size of unit
NVS-T1050	Roof Terminal for S-Series 1200	1050mm high
NVS-T1000	Roof Terminal for S-Series 1500	1000mm high
NVS-T1250	Roof Terminal for S-Series 1500	1250mm high

TYPICAL CURB LAYOUT AND DIMENSIONS

Total curb thickness: (dimension A + dimension B + dimension C) = 150mm. (see figure opposite for details).

Dimension A: Builder's curb – min 100mm or as required for structural considerations.
Min 150mm height above roof to avoid rain splash or snow build-up.

Dimension B: lining e.g. exterior quality ply.

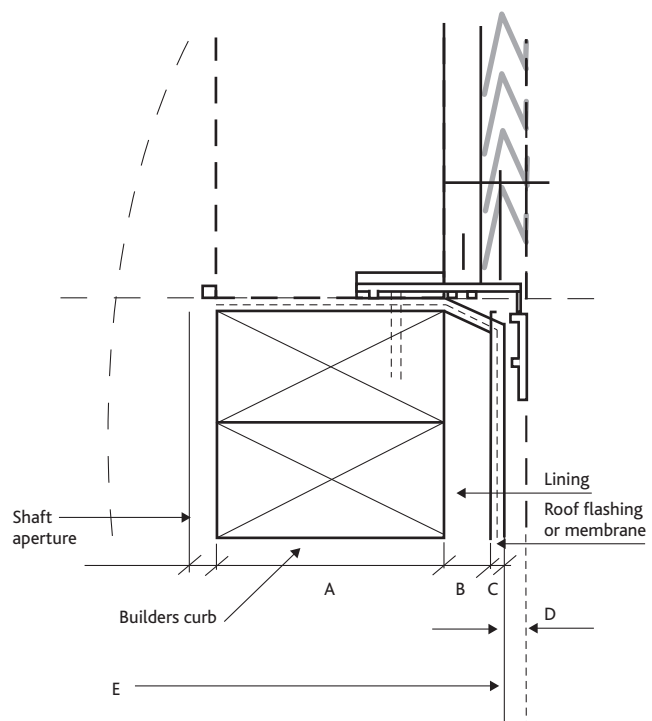
Dimension C: Roof flashing or membrane.

Dimension D: 15mm each side to outside edge of roof termination flange.

Flange thickness is 5mm, allowing 10mm tolerance for dimensional variability in curb construction.

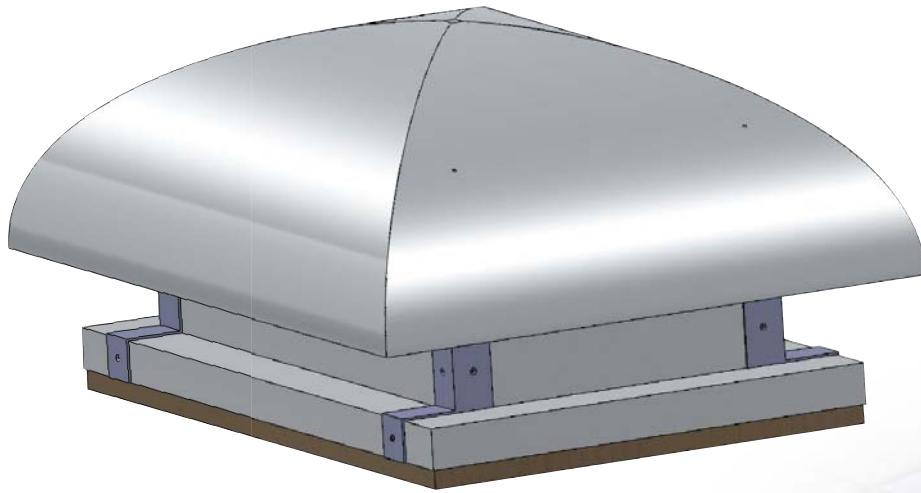
Dimension E: maximum side to side extent of builders curb and linings = shaft aperture size + 300mm (i.e. aperture + 150mm curb each side).

Please note, that the construction of a builder's curb is the responsibility of others and construction methods suggested here are indicative only.



E-STACK R-SERIES MUSHROOM ROOF TERMINALS

THE E-STACK MUSHROOM ROOF TERMINATION UNITS ARE DESIGNED TO WORK IN CONJUNCTION WITH THE E-STACK R-SERIES NATURAL VENTILATION SYSTEMS.



BENEFITS

The mushroom roof terminal connects the R-Series e-stack unit to fresh air, allowing the ventilation of a building via the roof. The mushroom has been designed to allow maximum air flow whilst preventing intrusion from the elements. The glass fibre mushroom terminal is an unobtrusive lighter and cheaper alternative to a traditional bladed metal louvre, that can be made from a variety of colours to blend in with a building, or for more adventurous designs they can stand out as brightly as desired.

WEATHER PERFORMANCE

Water testing involves spraying the terminal with water at an equivalent rate to 75mm/hr of rain, whilst subjected to a cross-wind of 13 mph. The initial aim was to measure the volume of water ingress during the test. Water ingress was too small to quantify in any meaningful terms. Testing was carried out on a mushroom terminal of similar design to that described in this document.

CONSTRUCTION

The mushroom terminal comprises three GRP sections and four galvanised steel corner brackets. The mushroom cover, the rectangular base and the splitter provide a weather-proof solution to allow appropriate air flow into and from the e-stack. The function of the splitter is to divide the air flow for winter mixing. Powder coated steel bird mesh prevents birds nesting and entering the building.

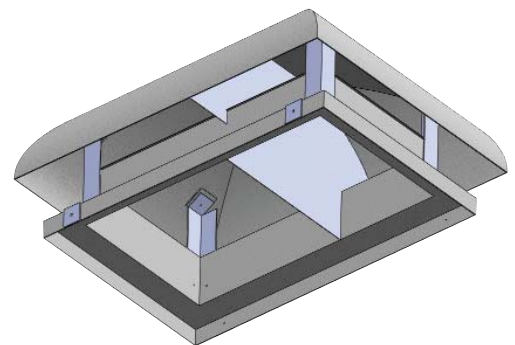
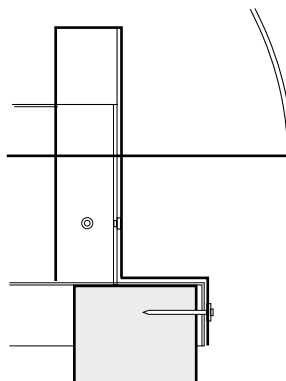
WARRANTY

The Termination units have a 3 year warranty comprising of first year parts and labour with remaining two years parts only.

INSTALLATION ARRANGEMENT

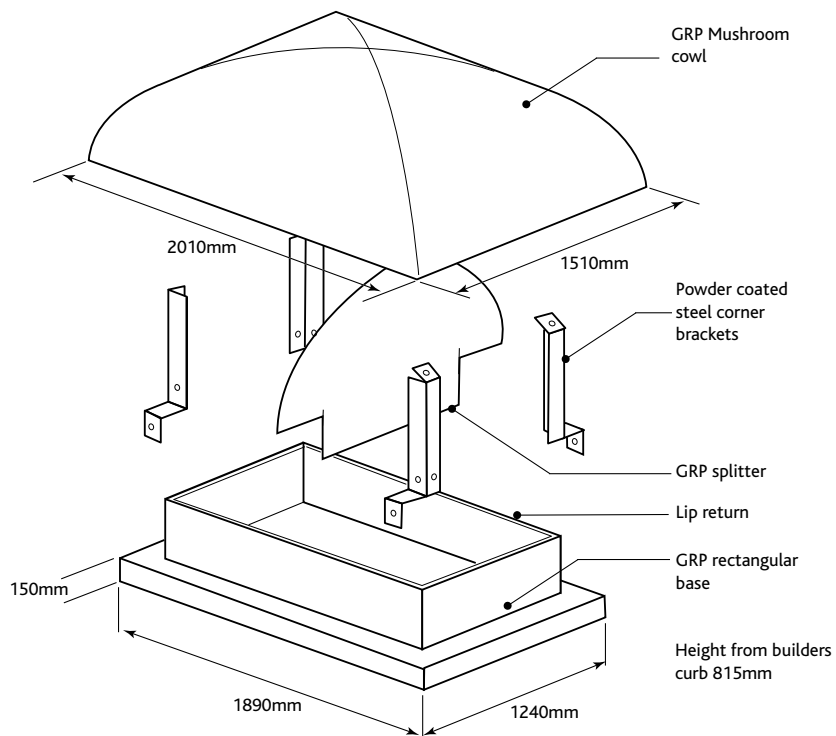
The diagram shows a section through the mushroom terminal base and the fixing arrangement with the location of the screw through the bracket to attach the mushroom to a builders curb.

The mushroom terminal arrives pre-assembled with bird mesh and brackets attached, ready for fastening to the curb through 9mm diameter holes.



View up inside mushroom terminal

DIMENSIONS FOR R - SERIES MUSHROOM ROOF TERMINALS



SPECIFICATION

Height including base:	920mm
Required curb dimensions:	1890(L) x 1240(W) x 150(H) mm
Construction:	GRP and galvanized steel
Weight:	70kg
Expected lifetime:	20 years
Colour:	Any standard RAL or BS
Maintenance:	None required