

September 2016

TECHNICAL DATA SHEET

PENETRATION BOX

All too often the issue of roof penetrations can fall between the main contractor, the roofing contractor and the M&E contractor. The result can be unsightly, unprofessional and at worst, be a potential leak source. AXTER penetration box offers all parties involved with roof penetrations the opportunity to get it right from the start.



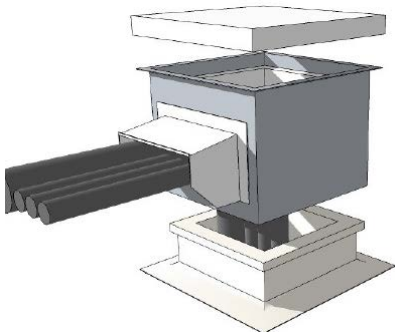
BENEFITS:

- Deals with the problem in advance, even if the exact services requirements are unknown. A wide range of sizes are available for all applications and can be located strategically over service risers and ducts.
- Reduces recalls to site. The roofing contractor can fit the penetration box unit and leave weatherproof and ready for the M&E contractor allowing the roof to be signed off sooner.
- Provides a consistent method of dealing with roof penetrations.
- Compatible with all roof constructions. Whether green or inverted, warm or cold, the range of UPVC and aluminium base upstands provide for all types of roof construction.
- Compatible with all roof finishes. Single ply, bitumen, liquid applied and hot melt applications.
- Sturdy and durable quality. The aluminium cabinets are insulated as standard and can be powder coated to any RAL colour if required. All lids are removable.
- Retro-fit options available. Most of the penetration boxes can be retro-fitted to existing service penetrations for refurbishment projects.
- Bespoke and custom units available to provide a custom solution for your requirements.

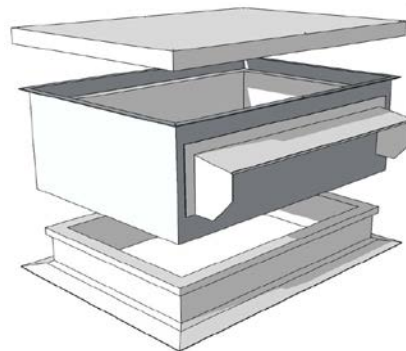
STANDARD SIZES AND LEADTIMES:

The following sizes are standard combinations normally available from stock, all other sizes are on a 2-3 week leadtime.

- 300 x 300mm UPVC base 150mm high
- 300 x 300mm Aluminium base (150mm & 400mm high)
- 400 x 700mm UPVC base 150mm high



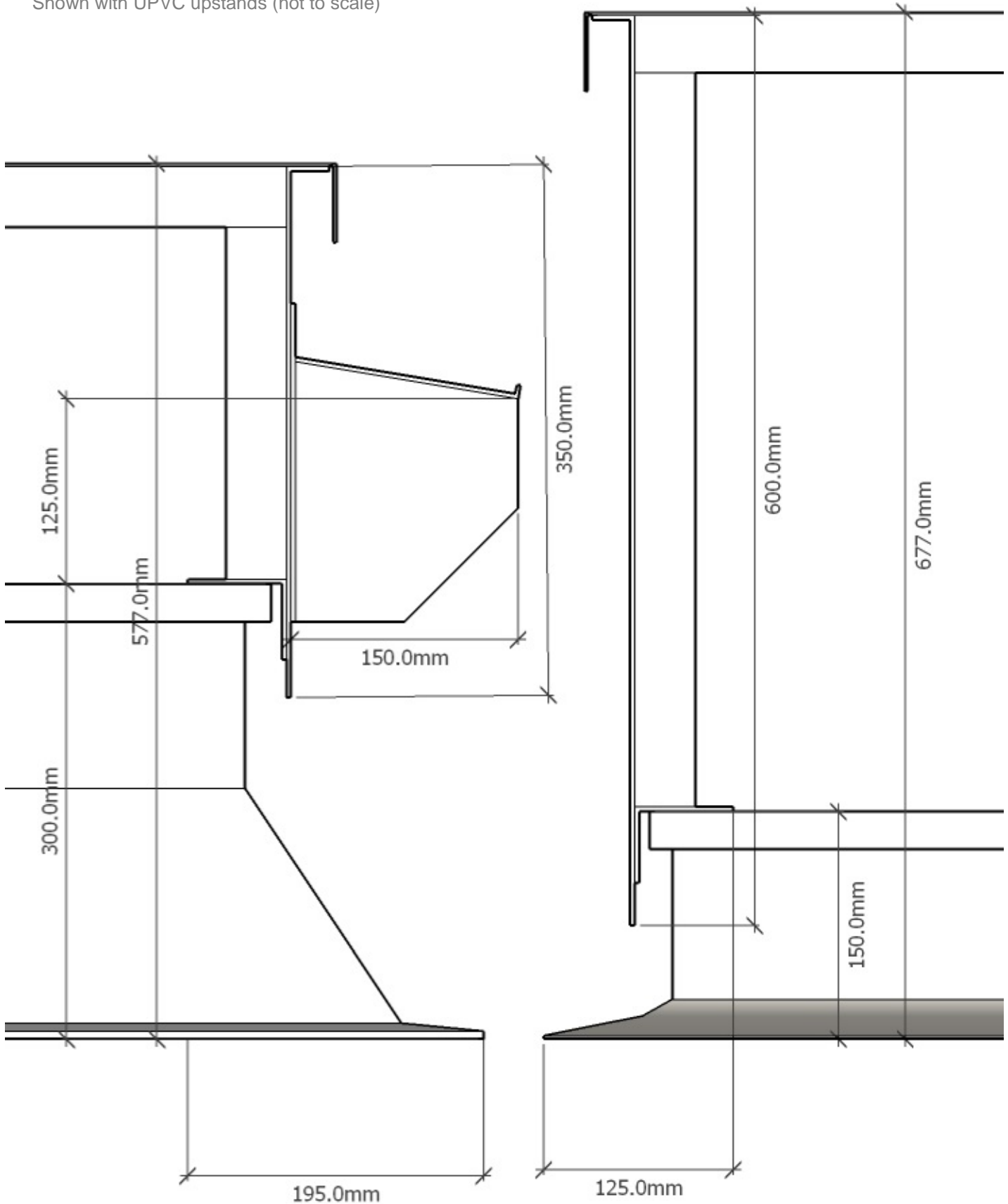
UPVC base, 300x300mm internal
150mm high, matching cabinet & lid
insulated 300mm weathering hood



UPVC base, 400x700mm internal
150mm high, matching cabinet & lid
insulated 700mm weathering hood

STANDARD DIMENSIONS:

Shown with UPVC upstands (not to scale)



USING THE RIGHT BOX FOR THE RIGHT APPLICATION

Select a base

Base Material: AXTER's penetration boxes bases are available in either aluminium or UPVC.

- Aluminium bases will normally be used for inverted roofs and hot melt systems.
- UPVC bases can be used with most bituminous, single ply and liquid applied systems.

Width and Length: For ease of use, the dimensions used in specifying the width and length are the clear internal dimensions.

- Bases are available in 300x300mm, 600x600mm, 400x700mm, 600x900mm, 700x1300mm.

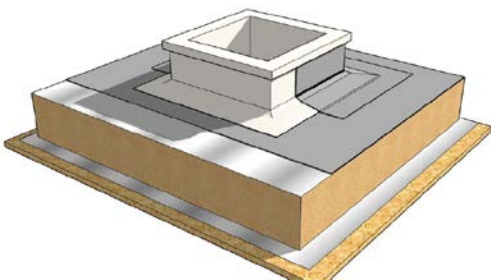
Roof aperture: The roof aperture size required is the same as the internal dimensions.

Height: For warm roof constructions, the height of the base required will depend on whether the base sits on the roof deck or on top of the waterproofing. The top of the base should be at least 150mm above the finished roof level. For cold roof constructions, a 150mm high base will normally be sufficient.

- Aluminium bases are available in 150mm and 400mm high for all sizes.
- UPVC bases are available in 150mm high only for 300x300mm bases, 150mm & 300mm high bases are available for all other bases. (300mm high bases are splayed)

Insulation: The aluminium bases can be insulated giving a 0.5 W/m°C U-value on request.

Powder coating: The aluminium bases can be powder coated to any RAL colour on request.

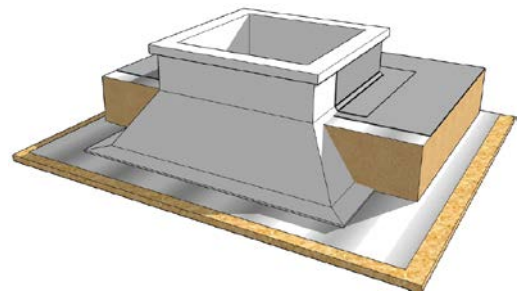


UPVC base 150mm

Uses: Single ply, RBM, liquid waterproofing

Roof types: cold or warm roofs

Applications: New build, retrofit, refurb.

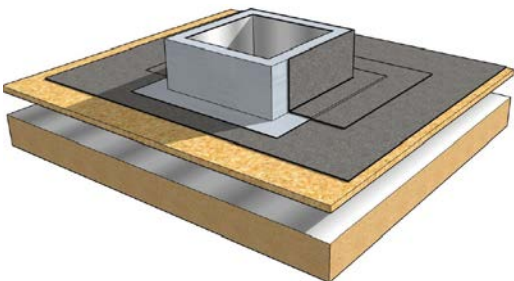


UPVC base 300mm

Uses: Single ply, RBM, liquid waterproofing

Roof types: cold or warm roofs

Applications: New build, retrofit, refurb.

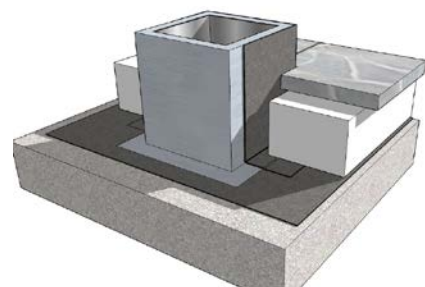


Aluminium base 150mm

Uses: RBM, liquid applied, hot melt

Roof types: cold or warm roofs

Applications: New build, retrofit, refurb.



Aluminium base 400mm

Uses: RBM, liquid applied, hot melt

Roof types: cold or warm, inverted, green roofs

Applications: New build, retrofit, refurb.

Choose a matching cabinet & lid

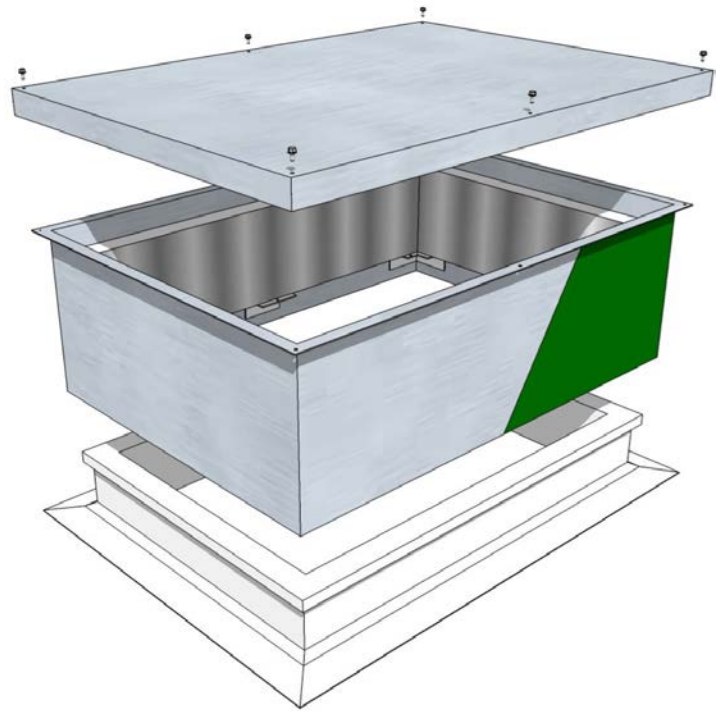
Material: The cabinets are manufactured from 3mm aluminium and come with a removable lid for easy access into the box.

Width and Length: For ease of use and ordering, the dimensions used will be the same as the base.

Height: There are two standard heights, 350mm & 600mm. These represent the overall height of the cabinet. When adding the base and cabinet heights, 75mm should be deducted to allow for the weathering lap between the cabinet and the base.

Insulation: All cabinets are insulated giving a 0.5 W/m°C U-value.

Powder coating: All cabinets can be powder coated to any RAL colour on request.



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