

Fixed Blast Louvres

Technical Data Sheet



Product Description

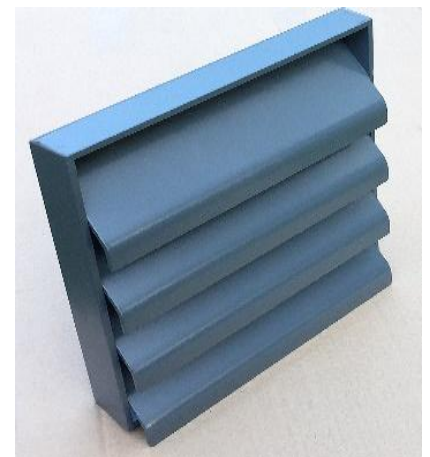
Blast louvres are manufactured to allow the free passage of air throughout buildings. They can also be used as a visual screen to hide plant and machinery.

In addition, they are built so as not to break apart when subjected to a blast load which would produce fragmentation. If a standard louvre collapsed under blast load there would be serious risk of injury to people and damage to property. Blast louvres are intended to prevent that from happening.

The louvres are primarily designed for commercial and military environments. This is a bespoke product and can be manufactured to meet customer's required dimensions.

Features

- Available in a factory PPC Finish, Mill Finish and Galvanised
- Can be used for both internal and external applications, installed into walls, panels and doors
- Can be installed into recess or face mounted with flange

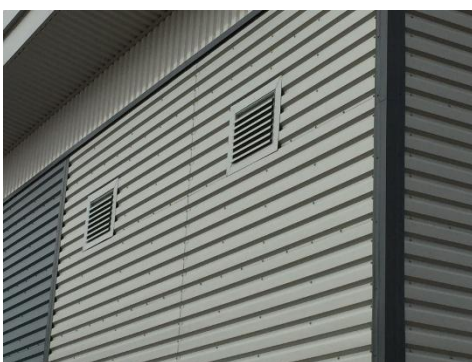


Specification

PROFILE	
✓	Folded or drawn steel profiles
✓	Available in Steel and Stainless Steel
✓	Minimum frame depth/wall thickness 100mm
FINISHES	
✓	Factory Polyester Powder Coat (PPC) finish
✓	Mill Finish
✓	Galvanised
AVAILABLE SIZES	
✓	Minimum 200mm width x 200mm height
✓	No maximum single pane size but suggest <1.5m ² due to weight
✓	With additional units – indefinite
WEIGHTS	
✓	Varies with blast protection required but minimum 25kg/m ²
CERTIFIED STANDARDS	
✓	Each unit has supporting independent third-party calculations available upon request
BLAST RATINGS	
✓	Individually calculated to meet and exceed required blast ratings
✓	Intended to protect against fragmentation
OPTIONS	
✓	Further structural frameworks to support specific wall apertures and applications
✓	Fragmentation protection option available
FIXING HOLE POSITIONS	
✓	Fixing hole positions can be adjusted to suit different wall depths and thicknesses
SHIPPING	
✓	Supplied in International Shipping Crates for dispatch

Areas of Application

- Chemical Production
- Petroleum Industry
- Paint, Varnish Manufacturers
- Energy/ Mining Industry
- Co-Generation Plants
- Recycling Centres
- Sewage Treatment (by-product recycling)
- Automotive (air bag, mfg. Plant lines)
- Grinding/Pulverizing processes -airborne dust
- Ink Manufacturers
- Printing Companies (solvent use/storage)
- Paper Process (solvent use/storage)
- Laboratory Test Facilities
- Hospitals (gas and/or flammable storage areas)
- Brewery Facilities (grain storage/processing)
- Fossil Fuel Plants (coal dusts)
- Food Processing (airborne dust)
- University Labs (chemical lab store rooms)
- Grain Milling Facilities (airborne dusts)
- Nuclear Power Stations



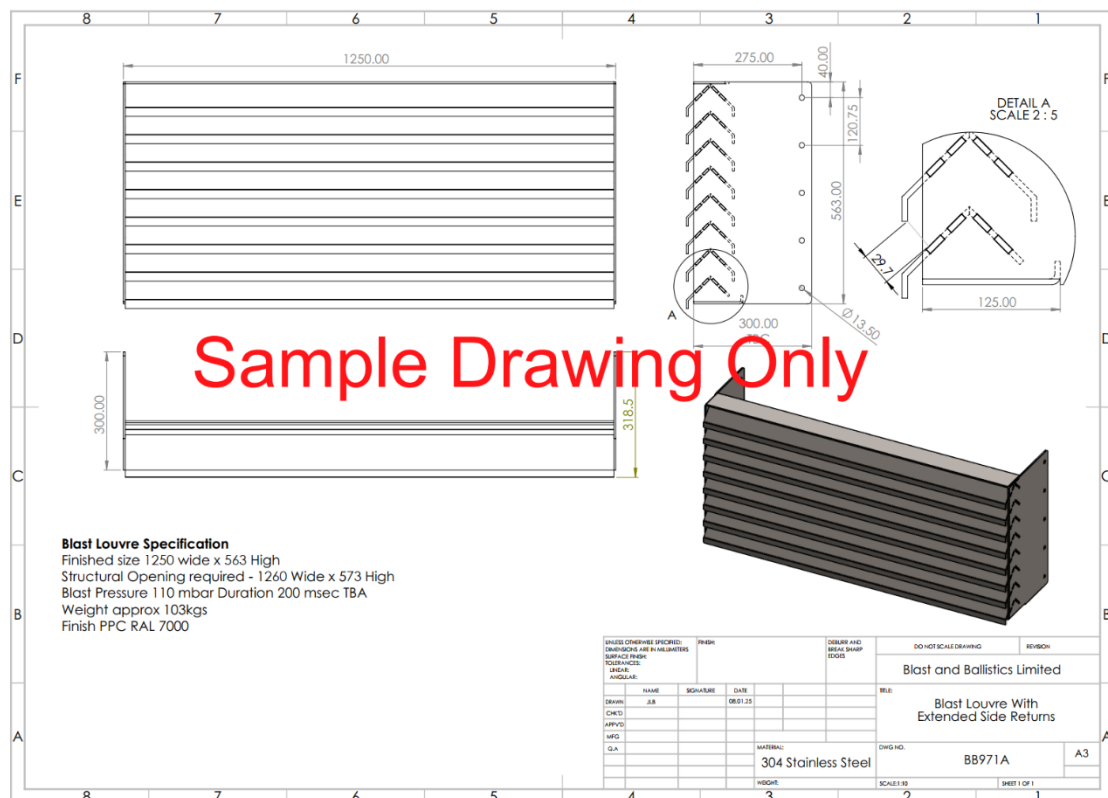
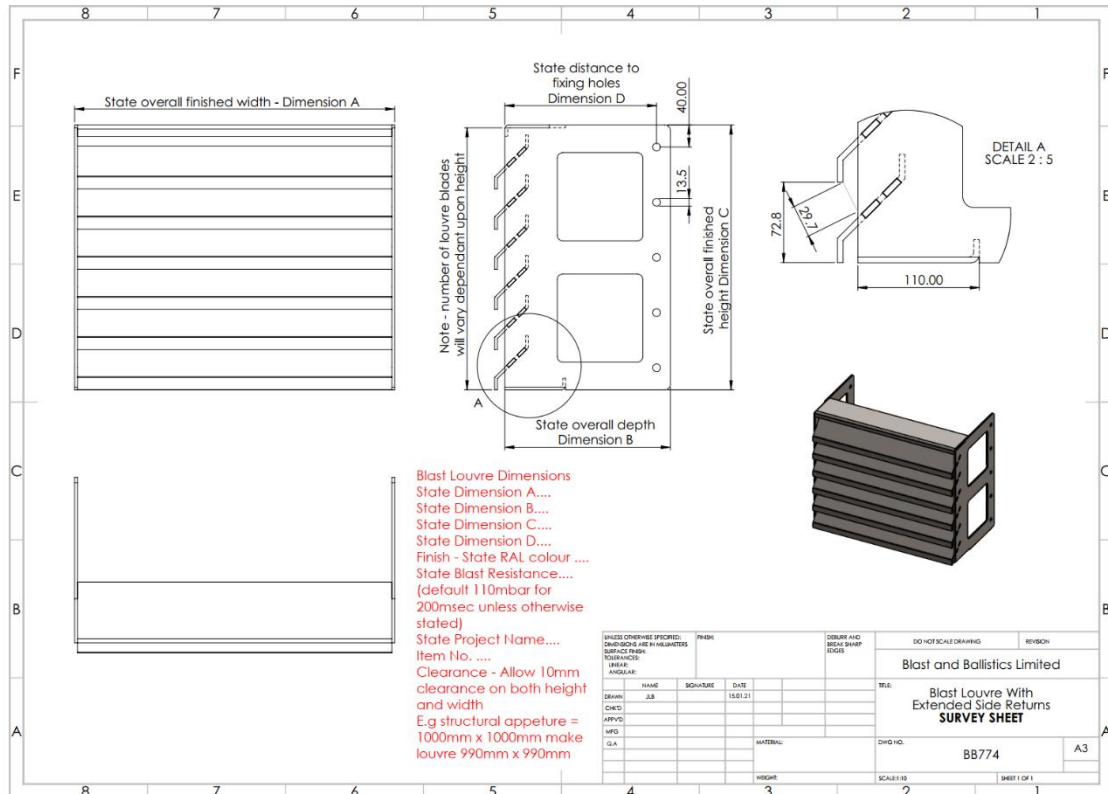
The louvre can be fitted:

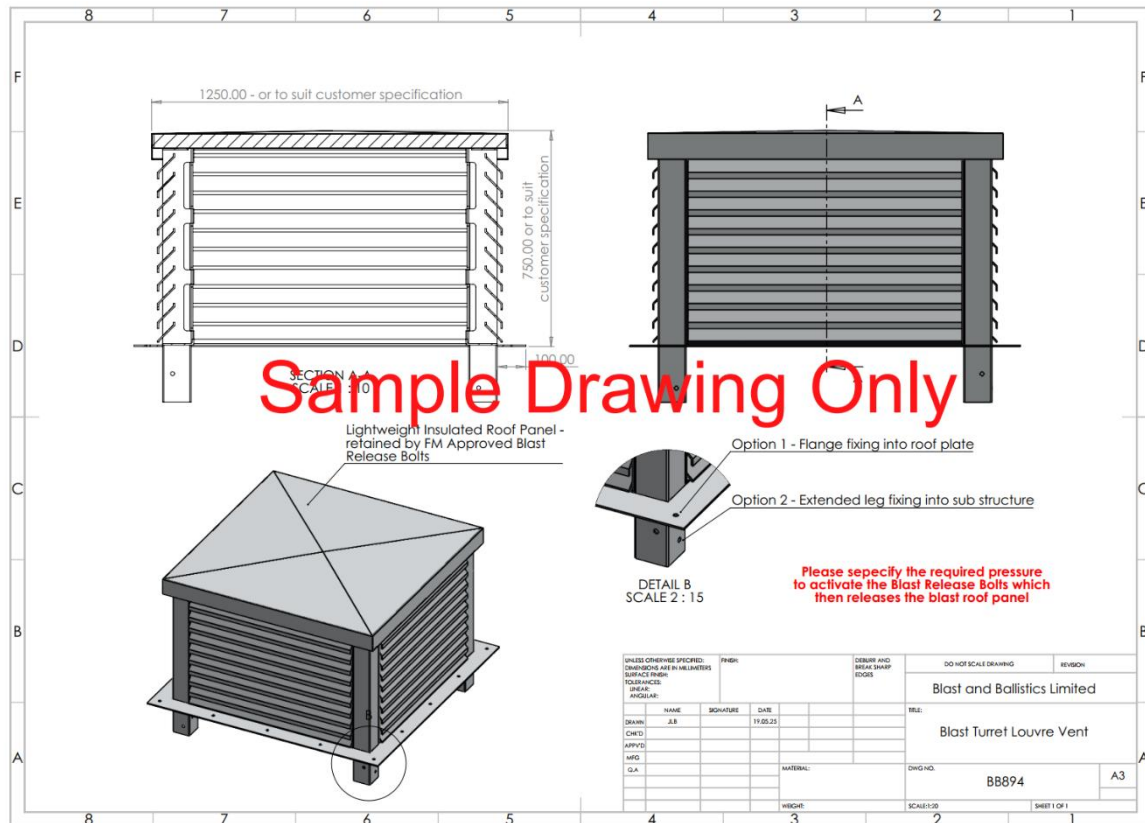
- Within a masonry or structural steel opening
- Surface mounted onto the face of a wall
- With internal flange for fitting from the inside of a building
- With external and internal flanges, bolting through, particularly useful for thin wall constructions



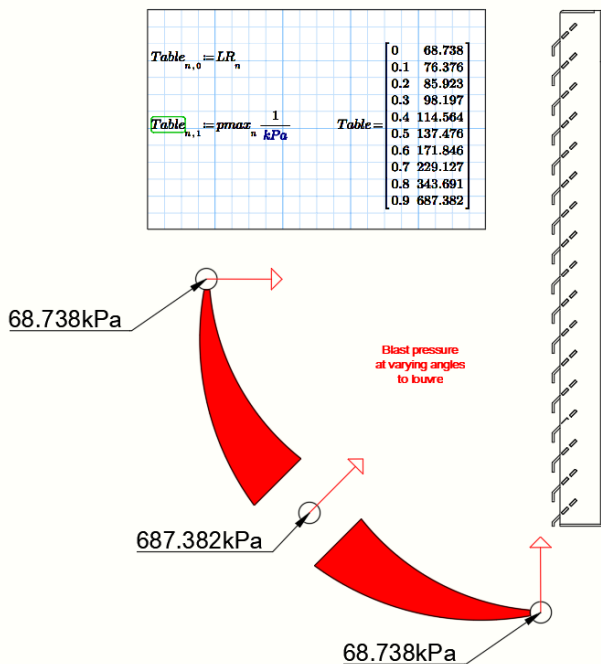


Sample Drawings





Calculation Extract



Our product is supported by independent third-party calculations.

Project specific calculations can be provided upon request.

Fragmentation Protection Option

Protection from fragmentation is also necessary in certain applications. This can include such operations as ammunition manufacturing.

In this instance, the blast louvre will also need to accommodate fragments or shrapnel that can be travelling up to as much as 3,000 m/s. In mitigating this resistance, we incorporate our ballistic technology to produce a system that offers both blast resistance, bullet resistance and hence fragmentation resistance.

This product is available in all sizes in galvanised or factory PPC finish. This unit is purpose made as with all of our products. Again, in terms of installation, these units can be reveal or surface mount fix.

They are suitable for both indoor and outdoor applications and work in both directions.

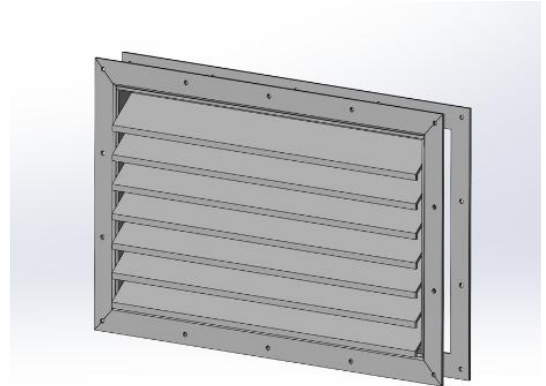
Project specific calculations and report are available upon request.



Fitting Instructions

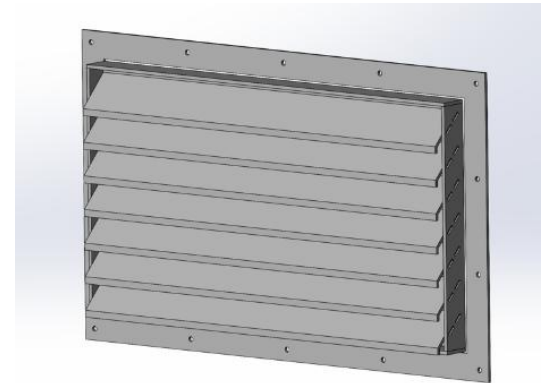
Option 1 – Double Flange Fixing

1. Ensure that the building aperture is clean and free from debris.
2. Insert the louvre from the outside of the building into the aperture.
3. Centre the unit within the aperture using packers.
4. Mark the fixing holes onto the face of the wall/panel and drill.
5. Remove outer unit, apply sealant mastic around the aperture and re-insert.
6. Offer the internal flange into place and connect the two flanges with grade 8.8 nuts and bolts.



Option 2 – Single Flange Fixing

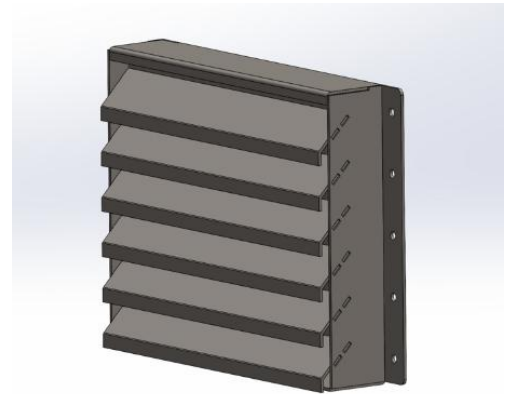
1. Ensure that the building aperture is clean and free from debris.
2. Insert the louvre from the inside of the building into the aperture.
3. Centre the unit within the aperture using packers.
4. Mark the fixing holes onto the face of the wall/panel and drill.
5. Fix into position with concrete screws or machine screws.



Note – Install this unit so that the flange faces the blast/threat and then the blast load will be borne by the flange more so than the fixings.

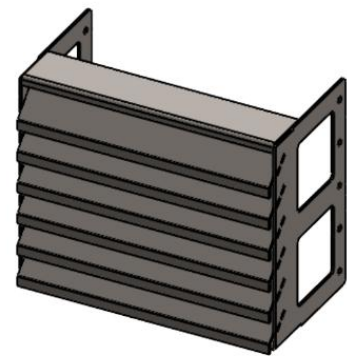
Option 3 – Surface Mounted

1. Ensure that the building surface is clean and free from debris.
2. Offer the louvre into position and mark fixing holes.
3. Drill all fixing holes.
4. Re-align louvre after having applied proprietary sealant around any openings to prevent the ingress of water as it runs down the wall.
5. Insert all concrete screws or machine screws.



Option 4 – Reveal Fix

1. Ensure that the building aperture is clean and free from debris.
2. Insert the louvre from the outside of the building into the aperture.
3. Centre the unit within the aperture using packers.
4. Mark the fixing holes onto the face of the reveal and drill.
5. Insert the louvre once again into the aperture and pack correctly, and insert fixings.
6. Apply a proprietary mastic sealant to all external perimeter joints to prevent water ingress.



See Terms and Conditions, available upon request.