



PINNACLE

DUCTWORK
Est 1992

SUITABLE FOR
RESIDENTIAL &
COMMERCIAL
VENTILATION
SYSTEMS

ResiDUCT™ A1 NON COMBUSTIBLE DUCTING

MADE TO ORDER DUCTWORK

A1 RATED NON-COMBUSTIBLE DUCTING

Fire protection is an essential aspect of building safety as fires spread quickly through a building and pose a significant risk to occupants lives. In accordance with Approved Document B Volume 2 (2019 edition incorporating 2020/22 amendments), combustible materials have been banned in and on the external walls of buildings in the following instances;

- Residential Buildings over 11m (England & Wales)
- Recreational & Assembly Buildings over 18m
- Buildings over 11m (Scotland)
- Any buildings undergoing unsafe cladding remediation work

Where residential apartment buildings fall within these criteria, **non-combustible ducting is required to prevent the spread of fire through ventilation systems where the ventilation ductwork terminates through the building façade.**



Class A1 Non-Combustible Ducting

The fire resistance classification criteria for construction products is detailed in BS EN 13501w+ A1:2018 and includes a list of products (European Commission 96/603/EC) which, under specified conditions, can be considered to be class A1 without testing. (see full details in the technical specification)

Pinnacle A1 Rated Non-Combustible Ducting is manufactured from 0.9mm hot dipped galvanised mild steel and is sufficient to provide A1 classification for the purposes of ductwork terminating through the façade of the building.



A1 RATED DUCTING: RESIDENTIAL APPLICATION

For residential ventilation system such as MVHR that have terminations running out to the building facade, A1 rated ductwork will be required (based on building type).

The A1 rated ductwork is directly connected to the standard PVC ducting used (e.g. 220 x 90mm) at the slab level, through the cavity wall and then dropped to meet the desired termination position on the facade wall.

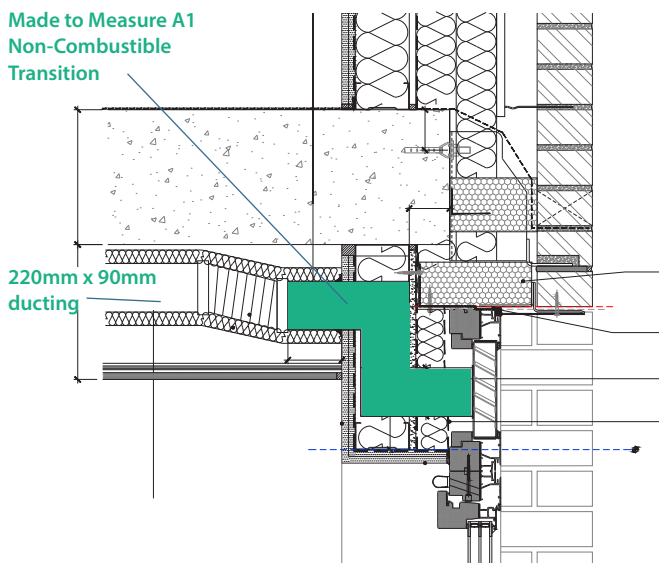
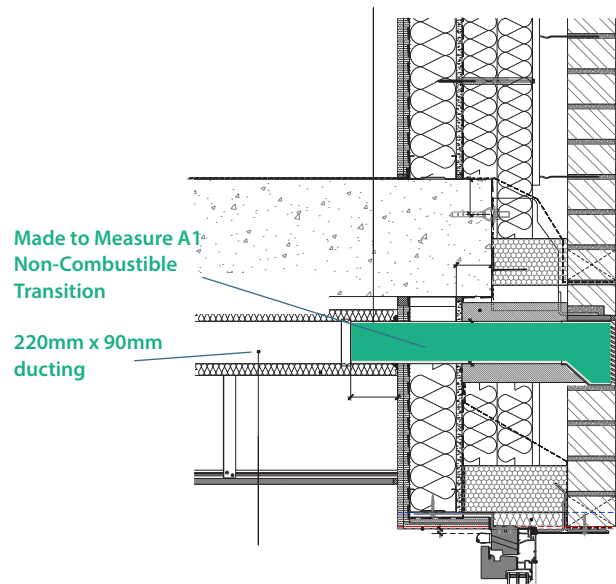


Image shows 300 x 100mm ResiDUCT™ A1 rated ductwork (insulated) to termination point. (as per client provided drawings)

A1 Rated Non Combustible Duct is Made to Measure.

We specialise in fabricating A1 Rated Ducting based on specifications and design drawings provided. As each duct run and termination position is unique to each development, all A1 Rated Duct is made to order and made to measure.

The illustrations show examples of A1 Rated duct transition requirements connecting directly to PVC (220 x 90mm) ducting.



A1 Fire Rated Airbricks

A1 Rated ducting is installed to the facade wall and requires a fire rated termination, typically an airbrick.

Pinnacle are an approved re-seller of the award winning Domus Solis Fire Rated Airbrick therefore offering a full solution for A1 compliance.

Please call to discuss you specific project requirements.

DOMUS
VENTILATION



A1 RATED NON-COMBUSTIBLE DUCTING

Technical Specification

Pinnacle Ductwork's Class A1 rated non-combustible ductwork range is suitable for installation where ventilation ductwork transits through the external/cavity wall and/or in internal fire compartment strategies.

Fire Resistance & A1 Classification

Class A1

Pinnacle A1 Rated Ducting is manufactured using 0.9mm hot dipped galvanised steel which is considered a non-combustible material (Class A1 without testing) in accordance with European Commission paper 96/603/EC (referenced in BS EN 13501w+ A1:2018).

Size

Bespoke and made to order for specified ductwork sizes

Application

Suitable for relevant buildings meeting Building Regulation 7(2) and Approved Document B (Volume 2) requiring materials, products and systems of an external wall to achieve A1 Non-Combustibility to BS EN 13501w+ A1:2018; including multi-storey buildings above 11m (England & Wales), Recreational & Assembly Buildings over 18m, Buildings over 11m (Scotland) (applied to new developments and specific planned remedial works)

Material

Galvanized steel. 0.9 mm (certificate of conformity provided)

Product

A1 Non-Combustible ducting is manufactured to order and delivered in one piece

Manufacturing

Plasma Cut / Folded / Pittsburgh Lock Formed & Any Seams Spot-welded / Intumescent Sealant* used in and on all seams/ joints, internally (where possible) and externally

11.3 Class E

The product shall satisfy the following criteria: EN ISO 11925-2

Under conditions of surface flame attack and, where required, edge flame attack (see 6.3), with 15s exposure time, there shall be no flame spread in excess of 150 mm vertically from the point of application of the test flame within 20s from the time of application

Regulatory and British Standard Document References:

• Approved Document B Fire Safety (Volume 2)

• **BS EN 13501w+ A1:2018:** fire classification procedure for all construction products, including products incorporated within building elements

• European Commission paper 96/603/ EC: A1 Rated Products (not tested)

• COMMISSION DECISION of 4 October 1996 establishing the list of products belonging to Classes A 'No contribution to fire' provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC on construction product. **Materials to be considered as reaction to fire Classes A1 and A1FL as provided for in Decision 2000/147/EC without the need for testing.**

• Products should be made only of one or more of the following materials if they are to be considered as Class A1 and Class A1FL without testing.

• Products made by gluing one or more of the following materials together will be considered Class A1 and Class A1FL without testing provided that the glue does not exceed 0.1% by weight or volume (whichever is the more onerous). Panel products (e.g. of insulating material) with one or more organic layers, or products containing organic material which is not homogeneously distributed (with the exception of glue) are excluded from the list.

• Products made by coating one of the following materials with an inorganic layer (e.g. coated metal products) may also be considered as Class A1 and Class A1FL without testing.

• **Products detailed: Iron, Steel and Stainless Steel, Aluminium and Aluminium alloys**

• *Showing products relevant to Class A1 Ductwork manufactured from Pinnacle Ductwork Manufacturers Ltd.