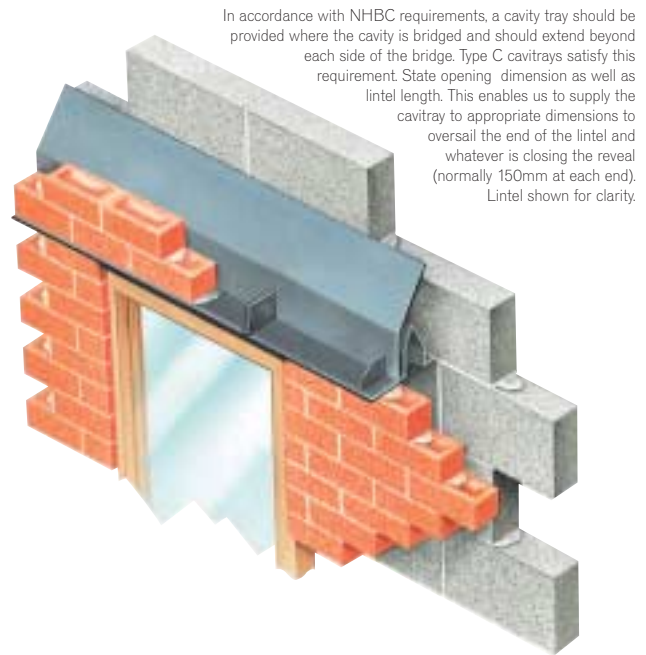


# Type C cavitray

## for use with lintels over openings

- Ready-shaped DPC trays for all lintel styles
- Wastage and inaccurate site fabrication eliminated
- Ensures consistent build details and regulation compliance
- Unobstructed cavity compartment area
- Traditional or timber frame construction
- Accurate cost and stock control



In accordance with NHBC requirements, a cavity tray should be provided where the cavity is bridged and should extend beyond each side of the bridge. Type C cavitrays satisfy this requirement. State opening dimension as well as lintel length. This enables us to supply the cavitray to appropriate dimensions to oversail the end of the lintel and whatever is closing the reveal (normally 150mm at each end). Lintel shown for clarity.

### designers' comments

Type C cavitrays are manufactured from solid DPC polypropylene. Solid DPC means there is no reliance upon surface coatings for protection. Protective measures for steel lintels, including provision of DPCs where appropriate, should comply with BS 5977: Part 2. This stipulation is qualified within BS 5628-3:2001 (5.11.6). Experience in manufacturing Type C cavitrays has highlighted four principal considerations:-

1) The need for a material to be sufficiently strong enough to resist accidental damage during construction yet sufficiently durable bearing in mind the planned life of the building.

2) A material that should be resistant to stress/creep deformation, and thus able to withstand the load to be imposed upon it. (creep deformation is dependent upon the stress (compressive) induced by the structure weight bearing upon same). The stress is normally graded into four classes:-  
 a) High is above 2.45N/mm which is generated in walls higher than 10 storeys.  
 b) Medium in the 0.5N/mm to 2.5N/mm range (4-10 storeys high).

### problem

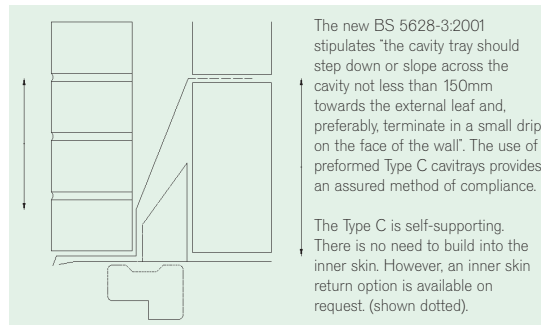
How to create preformed, ready-shaped DPCs for use with proprietary metal lintels. Ditto for use with cast in-situ, pre-stressed and pre-cast concrete lintels.

### introduction

The upgraded Type C cavitray range fulfils the latest British Standards and NHBC requirements which demand an independent DPC to be used with proprietary metal lintels in specified locations and applications. In addition, Type C cavitrays may be used to provide the obligatory DPC, when constructing using concrete lintels of most styles.

### solution

Type C cavitrays provide a harmonizing yet independent DPC tray to all lintel openings. Manufactured from solid DPC. The shape and functionality of every tray over every opening is of a consistent quality. Preformed Type C trays eliminate the danger of misplacement and installation deviances associated with site fabrications using roll materials. Type C trays are supplied in the profile to suit your project.



The new BS 5628-3:2001 stipulates "the cavity tray should step down or slope across the cavity not less than 150mm towards the external leaf and, preferably, terminate in a small drip on the face of the wall". The use of preformed Type C cavitrays provides an assured method of compliance.

The Type C is self-supporting. There is no need to build into the inner skin. However, an inner skin return option is available on request. (shown dotted).

Type C cavitrays are not limited to one cavity width. Our design permits numerous cavity widths to be accommodated, whilst maintaining a clear cavity compartment area. This is important if the risk of mortar build-up within the cavity is to be avoided. Available to order with each Type C cavitray are Type L lintel stopends. The Type L stopends have an integral anchoring butyl base which permits them to be applied in the most appropriate perp position towards the end of each Type C tray.

When stopends are applied, water is prevented from discharging into the cavity. Instead, water is directed and discharged out of the building fabric via weepvents which are incorporated within appropriate perp joints. Weepvents also permit the wall to breathe.

On the following page some examples of profiles available are shown. All profiles may be supplied with the cavity upstand either returning into the inside skin or terminating against the face of the inside skin. If the tray is to return into the inside skin, this is easily accommodated within an appropriate bedding course. Alternatively, upstands can finish against the inside skin face. This is possible because they are rigid, self-supporting, and slightly tensioned take up the maximum cavity width. Unlike traditional DPC they do not require aid to prevent sagging. Select the preferred format, taking into consideration any regional requirements.

The use of preformed Type C Cavitrays ensures every window and door opening is consistently and correctly

protected every time. The dangers associated with roll material: distortion, misplacement, sagging and installer error need not arise. Easy stock control and the elimination of cutting and wastage is another accompanying benefit.

The European Standard for lintels: BS EN 845.2:2001 qualifies corrosion protection required in any individual application, making reference to "the degree of exposure and climatic conditions". We recommend the use of an accompanying Type C cavitray at all times to comply with the new European Standard, which is not specific as to where or when such exposure conditions apply. Specifying of Type C cavitrays at all times to ensure compliance is accordingly recommended.

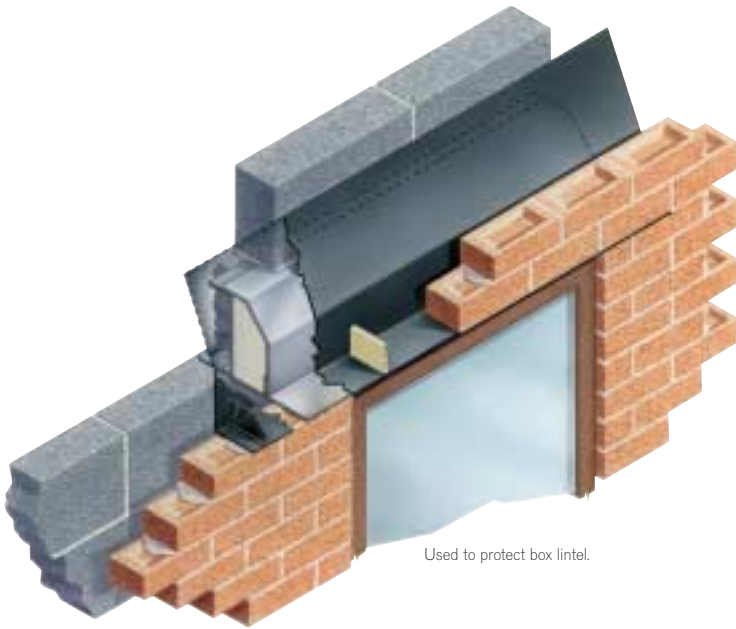
### sizes

Simply advise the shape you require and it will be manufactured to suit your project. Profiles also available to marry with proprietary lintels such as Catnic, IG, Birtley, Harvey, Jones, Keystone, etc. A Type C cavity tray schedule can be prepared to harmonize with any lintel schedule. Standard



# Type C Cavitray

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- Traditional or timber frame construction
- Accurate cost and stock control



Typical examples of some profiles. Type C cavitrays are suitable for use with a variety of lintels. The profile of each Type C may finish against the inside skin, or alternatively be built into the inside skin. This second option can necessitate use of a larger profile to marry with the course height. Always stipulate which version you require.

lengths in 2400mm lengths with siliconbond glove lapping recommended for making up longer lengths. Base thickness 1.5mm. Alternative thickness upon request.

### material

Solid polypropylene. Securtext finish on polypropylene.

### colour

Black.

### installation/site work

Bed Type C cavitray in illustrated position within steel/concrete lintel ensuring self-supporting cavity upstand adopts cavity width (or alternatively build upstand into

internal leaf). Ensure the Type C ends extend past the ends of the lintel, in accordance with N.H.B.C. requirements. Incorporate Type L stopends to suit bonding towards end of cavitray. Remember to install weepvents to facilitate discharge of water from cavitray. Ensure all construction and mortar bedding/bonding complies with the relevant British Standards. Do not dry bed at any time. Clean out leaving tray clear and free of mortar droppings.

### bill of quantity wording

Type C cavitray

Profile = .....  
 Incorporate and bed DPC cavitray in position to service lintel.  
 Incorporate stopends and caviweeps.  
 Total run in metres, including laps and overhangs = ...  
 (Alternatively combine length and profile schedule with lintel schedule.)  
 Request liability/conformity document upon completion.

### building regulations

Type C cavitrays comply with all Building Regulations and all appropriate standards. The illustrated examples are an indication of some of the

styles/profiles produced. In some instances it is desirable to build-in the cavity upstand into the inner skin, whilst in other instances the levered/hinged profile might be preferred. (Our levered/hinged profile provides a tensioned pressure against the inside skin.) In Scotland, Northern Ireland and the Isle of Man requirements can vary and customers should select the appropriate profile/format to comply with the applicable standards. In accordance with N.H.B.C. requirements, a cavity tray should be provided where the cavity is bridged and should extend beyond each side of the bridge.

- c) Low in the 0.1N/mm range generated in walls up to 4 storeys.
- d) Minimal being less than 0.1N/mm. Typical situation being parapet walls.

3) Shear stress is another consideration and a DPC material is required to have a good bond strength and resistance to deformation (a tendency to sliding). In addition, a high bond strength (flexural stress) is required to prevent failure of wall along the plane of DPC cavitray.

### technical observations

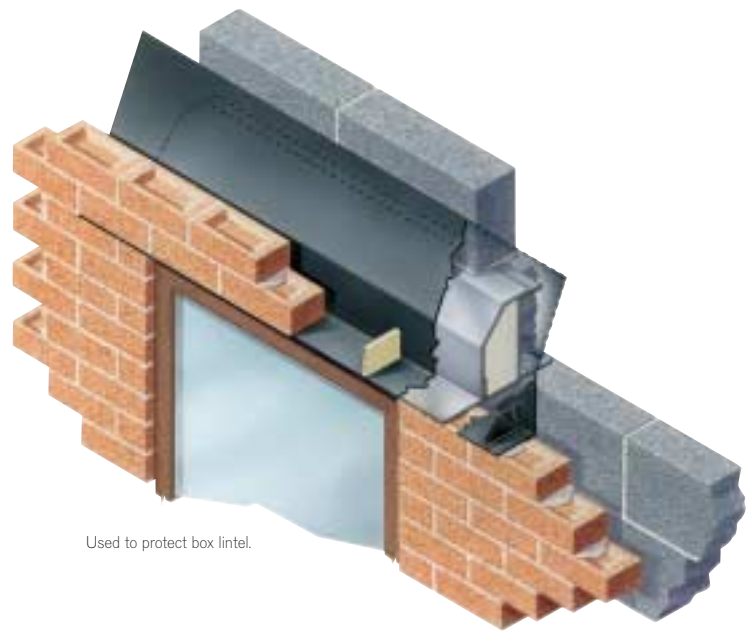
Strong preformed profiles. Adjustable stopends. Numerous cavity widths accommodated. Clear cavity compartment area. Avoids length wastage. Securtext finish promotes superior mortar adhesion. Branded with name and logo as proof of type and accompanying warranty.



# Type C Cavitray

for use with lintels over openings

- Available in different arch styles and design
- Acts as masonry guide - eliminates need for traditional centring
- Provides DPC element
- Traditional or timber-frame construction
- Ensures DPC integrity to entire head masonry



Used to protect box lintel.

Type C cavitrays satisfy this requirement.

## ordering

See inside back cover for immediate service throughout the United Kingdom. Merchant distribution network.

## related products and applications

See type L entry for compatible stopend. Also see type W weepvent, Euroweep-vent, beak weep and small weepvent, all of which may be used with type C cavitrays and provide exit routes for trapped rainwater, via the masonry perps.

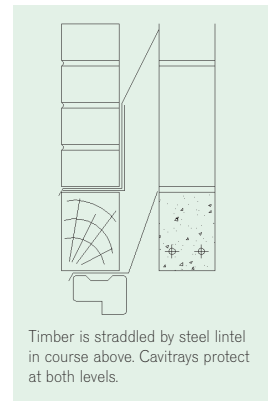
For curved head DPCs, see Type BA, AA and A. For load bearing lintel, see Cavilintel.



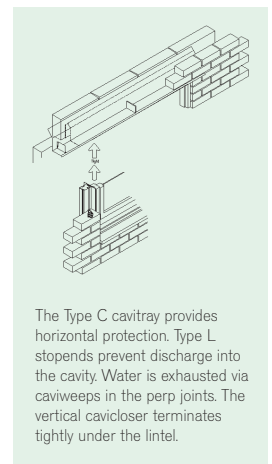
To satisfy the aesthetic demands of the area, traditional timber was required over the openings of all the external elevations of this property constructed in cavity masonry. The timber however was not capable of providing the requisite load bearing qualities. Support is provided by a steel lintel immediately above the timber, which extends 150mm past each end of the timber. Thus the timber is not subjected to any load bearing demands. A Type C cavitray protects the lower-level timber, in anticipation it might be susceptible to water ingress in the long term following timber shrinkage and settlement.



Without an accompanying protective tray this lintel installation fails to comply with UK Building Regulations and European Standards. Protection rising 150mm within the cavity is required. It should also overhang the lintel ends sufficiently to provide shelter to the reveal closing arrangement and ideally accommodate stopend and weep discharge provision. Note the block work inner skin does not offer an ideal course in which to support conventional (floppy) dpc. Consequently more material is required. In contrast, preformed Type C cavitrays overcome such problems. Type C trays are ready-shaped and supplied to lengths to harmonize with the lintel schedule. Type C trays are also self-supporting. Compatible stopends and weeps form part of the compliant answer for all common openings in cavity walls.



Timber is straddled by steel lintel in course above. Cavitrays protect at both levels.



The Type C cavitray provides horizontal protection. Type L stopends prevent discharge into the cavity. Water is exhausted via caviweeps in the perp joints. The vertical cavicloser terminates tightly under the lintel.

