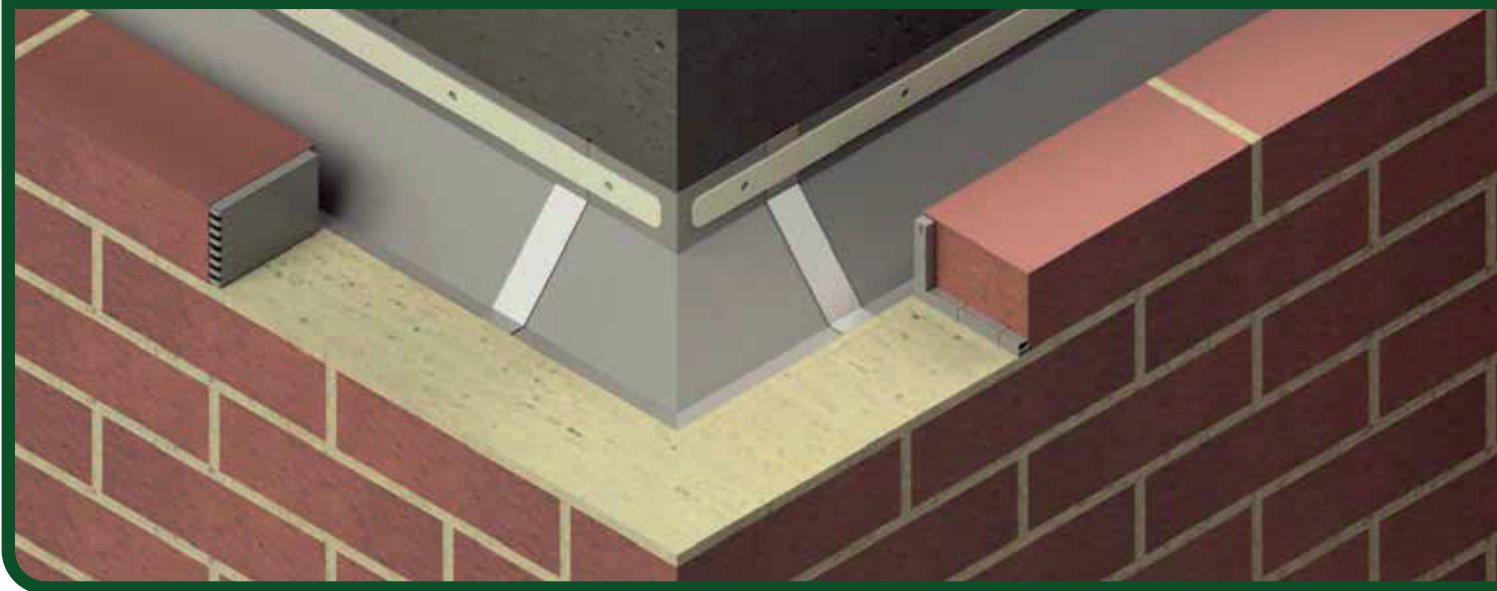




Dry Shield A1

Data Sheet



Dry Shield is an A1 fire retardant, flexible and easy to install cavity tray system.

It is a 2-layer laminate of dense weave glass fibre combined with an aluminium foil specially treated to protect against any alkaline corrosion. The laminate is bonded using a high-performance fire-retardant adhesive. Dry Shield is manufactured under license in the UK by our ISO9001 accredited partner and has a patent pending.

Product Features

- Achieves a reaction to fire classification A1 – to BS EN 13501-1: 2018 and BS EN ISO 1716 / Gross heat combustion conducted by the Building Research Establishment, compliant with UK Building Regulations
- Uses a (patent pending) non-combustible mineral coating protecting the aluminium from alkaline and other corrosion
- Flexible, lightweight yet robust and resistant to on-site damage
- Easily cut and trimmed with robust scissors or sharp retractable safety knife, no sharp edges or fibre dust
- Available in a number of widths, easy to install with minimal system components
- BS EN ISO 1716 / Gross heat Combustion: Result A1
BS EN 13501-1: 2018: Result A1



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Dry Shield A1

Data Sheet

Standards

A1 Fire Rated

- The only product of its type to attain A1 fire classification, tested by Building Research Establishment (BRE Group) to standards
- BS EN ISO 1716 / Gross heat Combustion: Result A1
- BS EN 13501-1: 2018: Result A1
- Compliant with UK Building regulations
- Environmental Management ISO 14001
- Quality Control ISO 9001

Building Regulation Approved Document B (Fire Safety) 2019 (2022)

Following incidents involving spread of fire on high rise buildings the UK Government introduced Regulation 7 to ban the use of combustible materials in external walls of newly defined 'relevant buildings'. There have been further reviews and the requirement for non-combustible materials has been made more robust.

Dry Shield A1 is suitable for use in any building requiring non-combustible cavity trays. Approved Document B has now been extended to include the use of non-combustible materials which become part of an external wall, or specified attachment of a 'relevant building' from buildings containing one or more dwellings; an institute; or contains a room for residential purposes to include hotels, hostels and boarding houses.

Further measures have been included to resist fire spread over external walls and resisting fire spread from one building to another where consideration should be given to the choice of materials used for external wall or attachments to the wall of all buildings. But specific guidance is given for external wall surface (i.e. outermost external material) for all residential use buildings with building height more than 11m to achieve Class A2-s1,d0 or better and all residential buildings 11m or less, that are less than 1m from the relevant boundary to achieve Class B-s3,d2 or better.

Our Dry Shield system meets and exceeds all the latest Regulation Approved Document B requirements.



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Dry Shield A1

Data Sheet

Standards (Continued)

Why use Dry Shield

Dry Shield is the UK's first A1 fire rated, flexible cavity tray. The system includes the flexible roll in a number of widths, rigid corner units, Joint supports for lap joints, fixing strips and tape. No need for lengthy design meetings or take offs. This system is off the shelf ready for next day delivery.

Usage

The Dry Shield cavity tray has been designed for cavity wall construction in residential, commercial or multi-storey buildings. It can be used in structural framing system inner leaf and masonry outer leaf. This product can be used where a cavity tray is required to achieve a fire classification to BS EN 13501-1 / A1.

Storage and handling

The Dry Shield cavity tray system can be stored vertically or horizontally under cover in original packaging.

Preparation

The Dry Shield cavity tray system can be cut with robust scissors or sharp retractable safety knife.



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Dry Shield A1

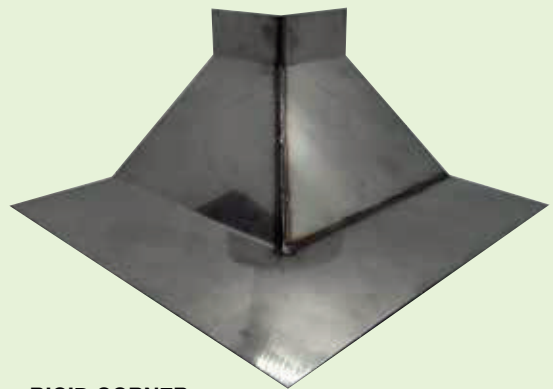
Data Sheet

System Components



DS-A1 ROLL

Widths: 450mm / 600mm / 900mm
Lengths: 5m / 10m / 20m rolls



**RIGID CORNER
EXTERNAL**



RIGID CORNER INTERNAL



JOINT SUPPORT



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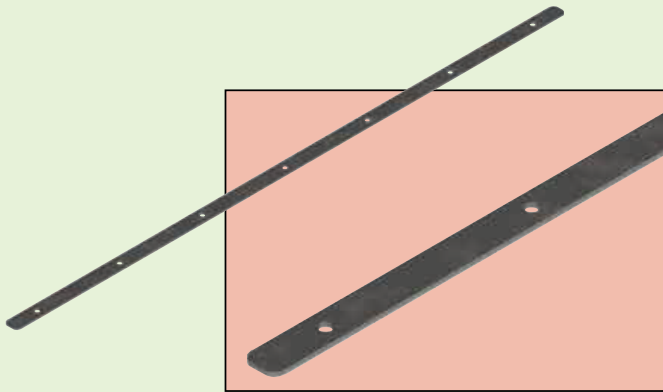
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Dry Shield A1

Data Sheet

System Components



FIXING STRIP



SILVER FOIL SEALING TAPE: 150mm x 50m



WEEP VENT



WEEP HOLE



TAPE APPLICATOR TOOL



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Dry Shield A1

Data Sheet

Specifications

Product Name	Dry Shield A1
Cavity Widths Accommodated	450mm / 600mm / 900mm (as standard)
Length	5m / 10m / 20m rolls
Material	2 ply laminate with glass fibre bonded to aluminium foil.
Thickness	0.3mm
Joint Overlap	100mm minimum
External and Internal Corners	90° as standard
Silver Foil Sealing Tape	150mm x 50m

All information contained in this data sheet is compliant with UK building regulations and is subject to regular audit. It is the user's responsibility to ensure they have the latest product data sheet. All information contained herein is correct at the time of publication and this version supersedes any previous versions.



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Dry Shield A1

Data Sheet

Specifications (Continued)

Property	Test method	Compliance	Results
Standard Widths		+/-5%	450mm /600mm /900mm
Lengths		+/-5%	5m/10m/ 20m
Thickness		+/-5%	0.3mm
Reaction to fire	BS EN 13501-1	<2mj/kg	A1
Calorific BOM Test	BS EN ISO 1716	<2mj/KG	A1
Water Tightness (Membrane)	BS EN 1928 – Method A		Pass
Watertightness (joint)	BS EN 1928 – Method A		Pass
Resistance to tearing	BS EN 12310	5 sample mean	Transverse 262N Longitudinal 842N
Tensile Strength Transverse	BS EN 12311-1:1999	5 sample mean	140.1N/mm2
Tensile Strength Longitudinal	BS EN 12311-1:1999	5 sample mean	180.7N/mm2
Shear strength of joints	BS EN 12317-2	5 sample mean	522 N
Join Strength (Dry Shield non-combustible tape)	DIN EN 14410		1000NM
Water Permeability (Dry Shield non-combustible tape)	ISO 15106		Pass
Puncture Resistance (Dry Shield non-combustible tape)	EN 14477	<100N/cm	Pass

Temperatures	Transverse	+20°C	Results
Resistance to static	5-20kg	5 sample mean	Pass
Waterflow test	Straight area no lap	1hr at 1 litre per minute	Pass
	Straight area overlap		Pass
	External corner		Pass
	Internal corner		Pass



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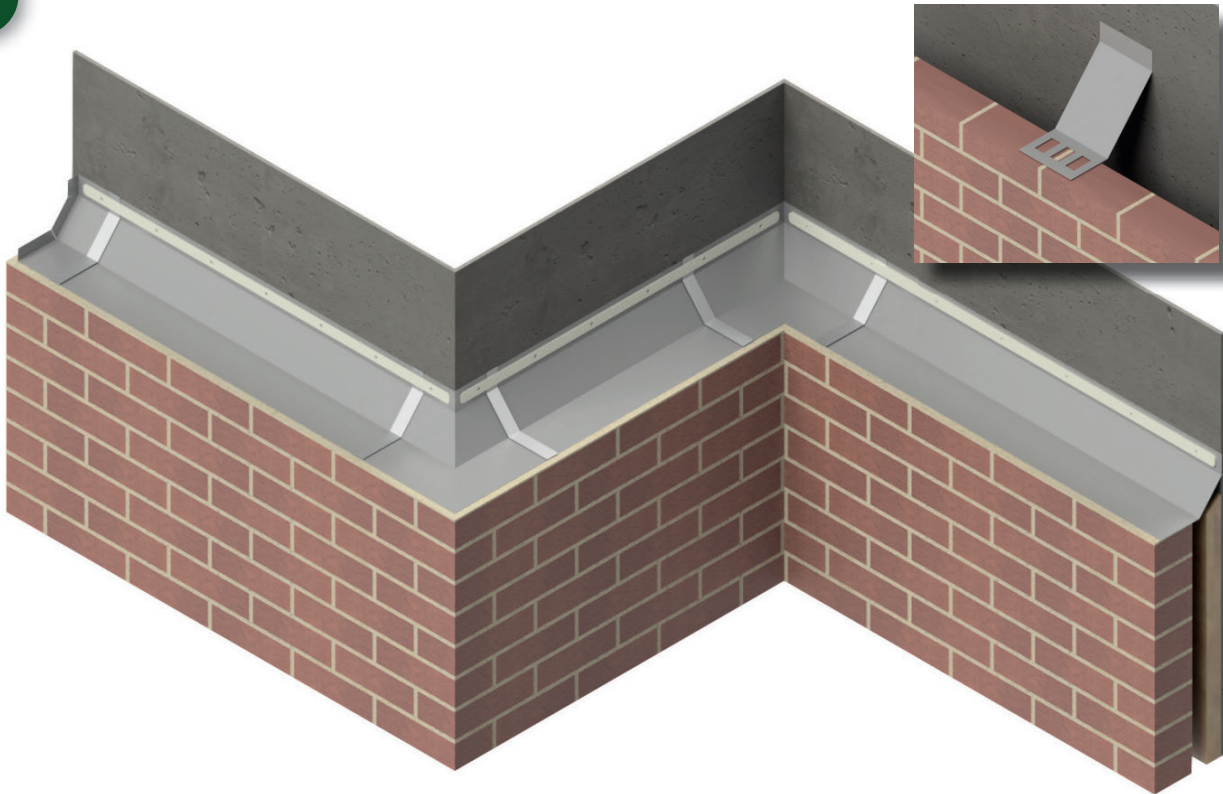
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Dry Shield A1 Installation Guide

Installation Process

1



Step One

Install a rigid corner on a half bed of fresh mortar then from corner to corner lay the Dry Shield cavity tray system. Where a joint in the cavity tray is required, install a Dry Shield joint support directly under the cavity tray in the area that is being lapped (all lap joints must be lapped to a minimum of a 100mm). Once you have created the lap joint install the Dry Shield silver foil sealing tape vertically ensuring the lap is to the middle of the tape. Seal the joint using the applicator provided. The applicator will ensure the tape fits snugly to the profile of the cavity tray. All joints in the system must be sealed using the Dry Shield silver foil sealing tape, including where it meets rigid corner units both external and internal. For more information on the tape please see the Dry Shield silver foil sealing tape data sheet.



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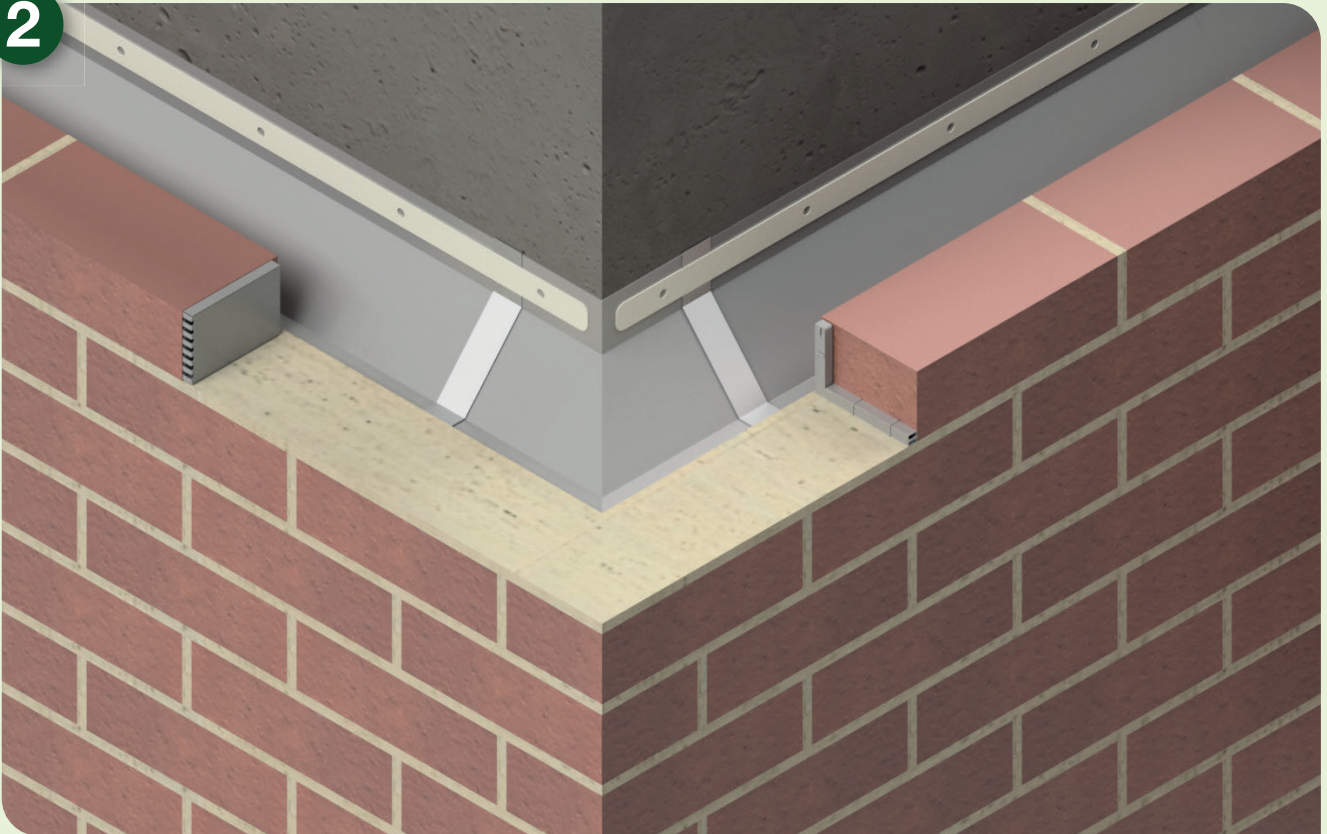


Dry Shield A1

Installation Guide

Installation Process

2



Step Two

Once the system has been fitted and the next course of brickwork is being laid, install either the full height weep vents or the weep hole as you go. Weep holes should be installed at 900mm centres on a cavity tray run or at 450mm centres over windows and doors. The next step is to install the fixing strip. The fixing strips are 1m long and have holes at 150mm centres giving you an easy installation process using the appropriate fixing for the substrate.



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Dry Shield A1

Installation Guide

Installation Process

3



Step Three

Where you need to stop the system, you simply create the stop end by turning the end up.

To make things easier when it comes to complex or awkward junctions like corners, steel columns, changes of level, there is a range of Dry Shield Non- Combustible Preformed Units available on request.



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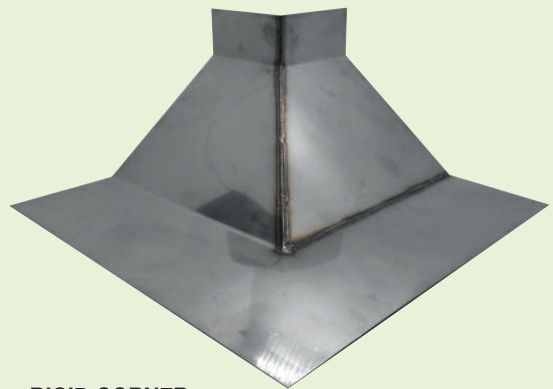
Installation Guide

System Components

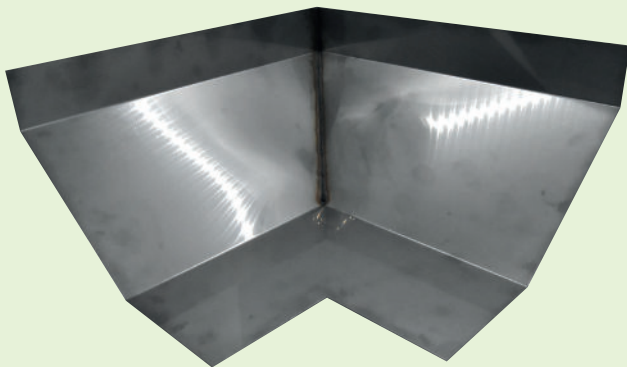


DS-A1 ROLL

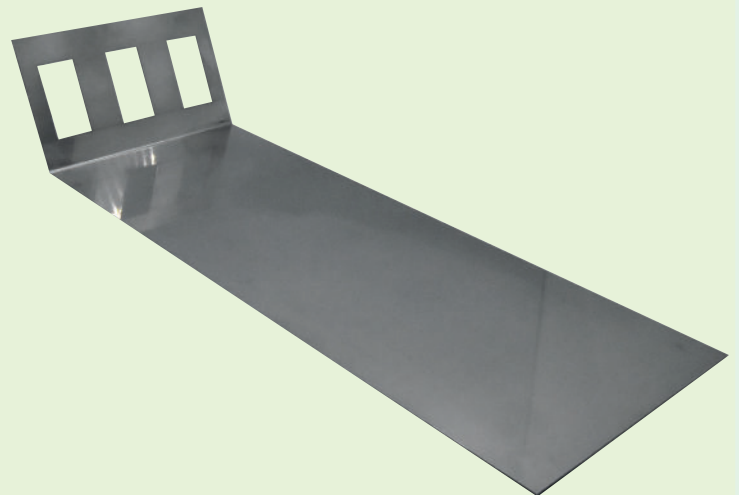
Widths: 450mm / 600mm / 900mm
Lengths: 5m / 10m / 20m rolls



**RIGID CORNER
EXTERNAL**



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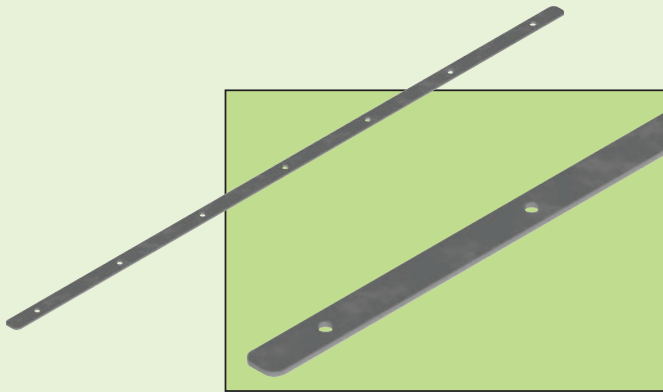
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Dry Shield A1

Installation Guide

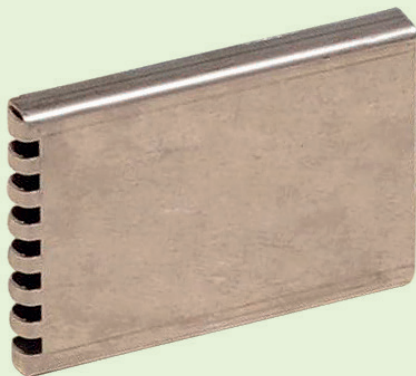
System Components



FIXING STRIP



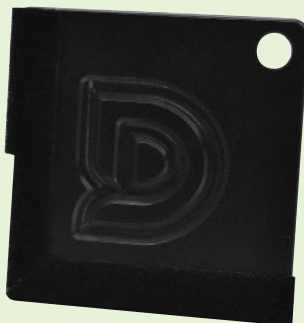
SILVER FOIL SEALING TAPE: 150mm x 50m



WEEP VENT



WEEP HOLE



TAPE APPLICATOR TOOL



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Dry Shield A1

Cavity Weep Joints

Standards

Product Description

The Concealed Weep Hole discharges the water from external walls. For use in areas such as:

- At ground floor slab level.
- Within cavity tray systems.
- Over external lintels.

The Weep Vent is a multi-function product for discharging water from external walls and ventilating the cavity.

It can be used in **all the above and:**

- Where a cavity must be ventilated.

Features & Benefits

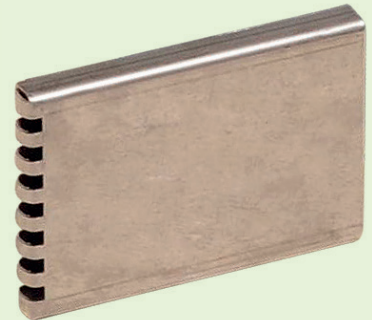
- Pre-formed to guarantee reliable water discharge.
- Less likely to become blocked by simply leaving the vertical joint open.
- Front grille prevents entry of large nest building insects into the cavity when using our full height weep vent.
- 4mm wide front aperture prevents large nest building insects entering the cavity when the concealed weepholes are used.
- Stainless steel Grade 304 2B, 0.7mm thick stainless steel as standard.
- Meets all relevant British standards.

Features & Benefits

- To work effectively the Dry Shield Weep Vents should be placed directly on top of the cavity tray system.
- The Dry Shield weep vents should be spaced at 900mm centres on a cavity tray run or at 450mm centres on a cavity tray run above windows and doors.
- Extra care should be taken to ensure the back of the weep vents/weep holes are not blocked by mortar droppings from above.



Concealed Weep Hole



Weep Vent



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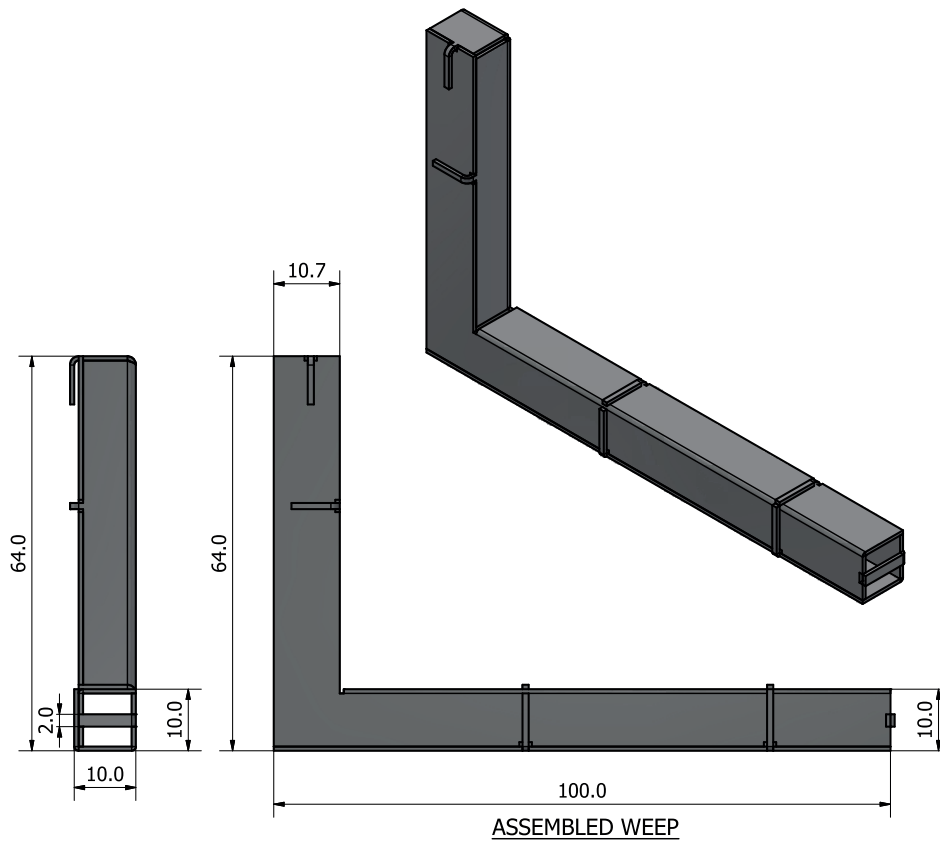
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Dry Shield A1

Cavity Weep Joints

Concealed Weep Hole



Concealed Weep Hole Specification

Height	Width	Length	Colour
64mm	10mm	100mm	Stainless Steel



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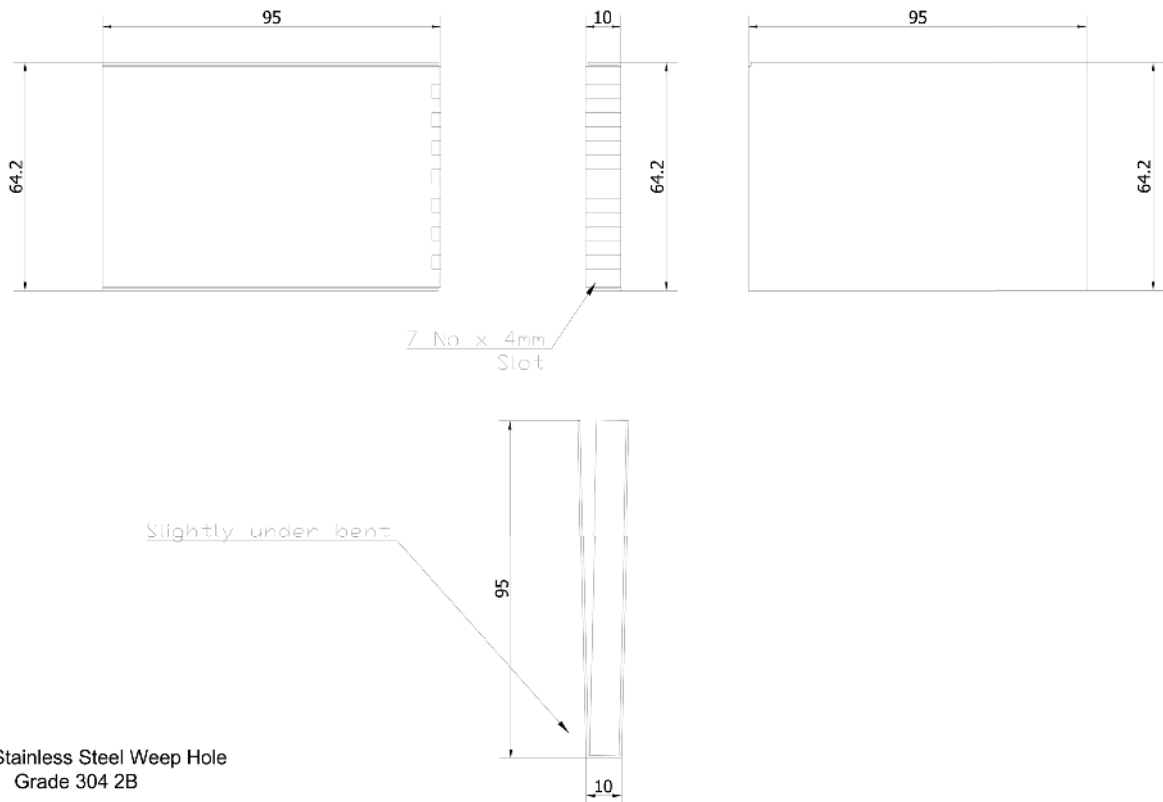
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Cavity Weep Joints

Weep Vent



Weep Vent Specification

Height	Width	Length	Colour
64.2mm	10mm	95mm	Stainless Steel



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