







March 202

# RIW CAVITY DRAIN R7



Other systems are available for specific uses, refer to Typical Uses inside.



- Easy to install
- High drainage capacity
- High factor of safety
- High compressive strength
- Chemically resistant
- Can be applied to wet substrates

### **APPLICATIONS**

Basement and Sub-structures

#### **APPLIED TO**

- Concrete
- **Masonry**



## **RIW CAVITY DRAIN R7**

#### **TYPICAL USES**

Cavity Drain R7 is used in situations where site conditions or structural design make it difficult or impossible to use traditional tanking methods. Cavity Drain R7 is used to collect water entering the structure and channel it to a sump or collection point for disposal (see details).

Cavity Drain R7 is suitable for use on floors and ceilings, please consult RIW for further information/guidance.

When designing Type C structures (drained) protection, as classified in BS 8102: 2009, the product applied correctly, is capable of providing the levels of protection required for Grade 1, 2 & 3 basements.

The product can also be used in conjunction with Type A or B protection where additional combined protection is required.

Other systems available are:

Cavity Drain R20 – suitable for use on floors and vertically where a larger drainage capacity system is required.

Plaster Drain – suitable for use where walls are to be finished directly with a plaster or render.

#### **PERFORMANCE & COMPOSITION**

Form	HDPE profiled sheet	
Colour	Translucent	
Thickness	0.5mm	
Stud height	8mm	
Roll size	2m* wide x 20m long	
Weight	0.48kg/m <sup>2</sup>	
Laps - Side - End	70mm 200mm	
Maximum drainage capacity	2.25 litres/sec/metre length	
Working temperature	-30°C to 60°C	
Maximum compressive strength	250kN/m²	

<sup>\*</sup> Includes dome free area for overlapping rolls.

The above performance figures are typical values and should not be considered a product specification.

#### **DURABILITY**

Subject to normal conditions of use Cavity Drain R7 will provide an effective barrier to the transmission of water and water vapour for the life of the structure.

#### **SPECIFICATION**

J40-Sheet Tanking/Damp Proofing in accordance with NBS Clause 290. Please consult RIW for further information.

#### INDEPENDENT AUTHORITY

Cavity Drain R7 has been awarded British Board of Agrément Certificate No. 05/4232, covering its use on walls, floors and ceilings above and below ground.



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0799-CPD-13

EN 13967:2012 Flexible sheets for waterproofing plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet, waterproofing course moisture and ventilation, type V

Reaction to Fire:		Class E
Tensile strength properties (minimum):		
	MD	≥ 330 N/50mm
	CMD	≥ 310 N/50mm
Resistance to static loading:		Pass at 20kg
Resistance to impact:		Pass at 900mm
Resistance to tearing (Minimum):		
	MD	≥ 330 N
	CMD	≥ 290 N
Joint Strength:		NPD
Watertightness:		
- After heat ageing		Pass
- After Chemical ageing		Pass

#### **ANCILLARY PRODUCTS**

RIW produce a range of ancillary products for use with Cavity Drain R7 (see also separate data) which includes:

Sealing Rope – a self–adhesive rope for sealing around services, fixings etc.

Brick Plugs – a fixing plug for vertical fixing of the Cavity Drain.

Overtape - a self-adhesive tape used to seal over joints, when necessary.

Sealing Tape - a self-adhesive tape for sealing between flanged overlaps.

Aqua Channel – an internal peripheral drainage channel for use at the base of the wall.

#### CONSTRUCTION

#### **GENERAL**

All construction should conform with the Building Regulations, Codes of Practice and British Standards in current use at the time the building is being constructed. In particular it is recommended that reference is made to BS 8102: 2009.

#### **PREPARATION**

All surfaces: Should be firm, and free from obstructions, which would hamper free drainage. Defects that might result in unacceptable leaks should be remedied before the system is installed.

Concrete surfaces: Should be treated with Cementseal Primer to reduce the risk of leaching of free lime or mineral salts, and to avoid the obstruction of the drainage system.

#### **APPLICATION**

Vertical: Installation of the Cavity Drain R7 is ideally commenced at the top of the construction. The lower sheet is always positioned in front of the upper sheet, to form a 'weathered lap'.

Fixings: Should be made, using Brick Plugs, into 10 mm diameter drilled holes to a minimum depth of 75mm (use punch). Fixings are sealed with Sealing Rope, which is packed around the brick plug before positioning. The fixings are normally required at 1.0m centres, and should be staggered. Fixings are also required immediately either side of the laps.

Overlaps: Flanged edges should always be positioned in front of, and overlapping, the previously installed membrane width. Laps with flanged edges are sealed using Sealing Tape, and laps without flanges are interlocked with the outer edge covered with Overtape.

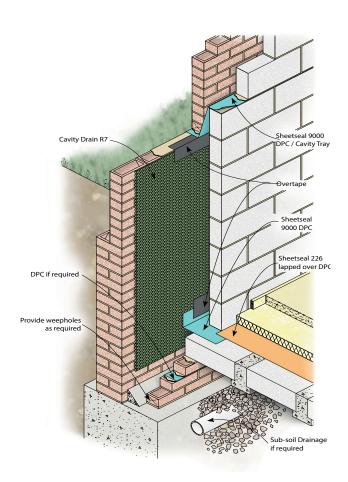
Wall/floor junctions: Incorporate Aqua Channel as per typical details.

Service penetrations: The Cavity Drain R7 should be cut so it forms a butt joint against any projections, and then sealed with Sealing Rope. The surface should then be cleaned prior to application of Overtape around the penetration.

Protection: Vertical surfaces should be protected, by dry lining or by building an inner masonry wall against the Cavity Drain R7. Inner masonry walls may be tied back into the Cavity Drain R7, by fixing into the Brick Plugs. A similar method can be adopted should a 'dry lining' system be required.

Any damaged areas must be repaired, by cutting a patch at least 200mm larger than the damaged area. The patch is then overlaid and the edges sealed using Overtape as elsewhere.

Drainage: A drainage system of suitable capacity should be provided to collect and dispose of the infiltrating water. The system must be maintainable and inspected at regular intervals.



Suspended floor detail

#### **SUPPLY**

#### **AVAILABILITY**

All products can be obtained through Builders Merchants or approved stockists. A list of approved stockists is available from RIW's offices.

#### PACKAGING

Cavity Drain R7 2m wide x 20m long

Brick Plugs Box of 100

Sealing Rope 10mm wide x 5m long rolls

Sealing Tape 30 x 2mm x 20m long rolls

Overtape 150mm x 20m long rolls

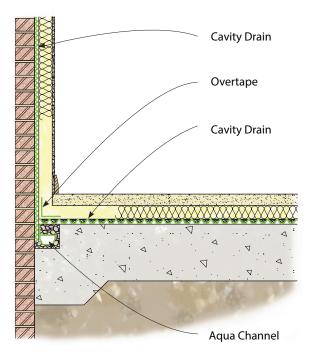
Aqua Channel 2m Lengths

#### STORAGE

There are no special requirements but rolls should be kept upright under cover and protected from extremes of temperature.

#### **TECHNICAL SERVICES**

The Technical Department is available to advise on individual projects and to prepare or assist in the preparation of specifications and drawings. A list of experienced applicators of our materials is available from RIW's offices.



Wall Floor Junction with Dry Lining
System

The information in this literature was correct at the time of going to press. However, we are committed to continually improving our products and reserve the right to change product specifications.

For the latest information, please consult RIW. Conditions of use are beyond our control, therefore we cannot warrant the results to be obtained.

#### **RIW Limited**

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