

# Rain Screen Baffles and Flashings



- Control of penetrating water
- Pressure equalised and open screen formats
- Stainless Steel and Petheleyne sections
- Available in all dimensions

DAMP-PROOFING

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Cavity Trays

## designers' comments

The principle of curtain walling/open panel cladding is similar to that witnessed where a fly cover stands above a tent – effectively preventing rain from reaching the lower canvas that remains dry. When the off-standing external screen is similar to the external skin of a cavity wall, the use of conventional cavitrays might be appropriate. However, if the external screen consists of non-butting panels, or is perforated by open joints, slots or ventilation apertures, (necessary to meet the (PER) pressure-equalisation requirements of an exposed structure), one has the accompanying obligation to address localised water ingress that can be more severe. Additionally, whereas moisture-laden air can rapidly be expelled via repetitive ventilation apertures within curtain walling, these also require adequate flashings and baffles to provide effective control of penetrating water.

## technical observations

The thermal loss via polypropylene flashings and baffles is minimal. Thus their use can be employed to good effect to control water paths and maximise potential comparative heat retention.



## problem

How to provide rain penetration control and drainage within rain screen and panel clad constructions.

## introduction

In open rain screens and pressure-equalised rain screens (PER), dependence is placed on the 'screen' layer deflecting the kinetic force of the driving rain. Rain screens can minimise the building wetting forces including capillary behaviour and wind pressure differences. Preformed rain screen flashings and baffles are necessary to arrest water that penetrates between and gravitates behind the screen face.

## solution

Rain screen baffles and flashings are specifically profiled to suit individual applications. They are proportioned to protect the rain screen where there are intentional openings. Examples include vents, vertical and horizontal slit junctions and eyebrow apertures between panels. Baffles and flashings are incorporated so they arrest and immediately evacuate

water from the compartmented screen section. In the case of horizontal rain screen flashings, these are secured to the inner face and moulded with an incline predisposed to drain water out of the structure. Where baffles and flashings are secured in a vertical application, it is commonplace for the profiles to splay between 120° and 150° rather than project at a 90° angle, which is less tolerant to imbalanced air movement within the vertical compartments.

## sizes

Profiles supplied on a bespoke basis. There are generally no limitations to sizes within all popular constructions. Please see examples illustrated. Upon receipt of drawings we will be pleased to advise you what is recommended for your project.

## material

Choice of two standard materials: stainless steel or petheleyne.

## colour

Natural stainless finish or black petheleyne.

## installation/site work

Rain Screen Baffles should be incorporated at the appropriate stage in construction following good practice and recommendations of BS5628 and Robust Details.

Build into inside skin or secure against inside skin as per instructions that accompany all consignments.

## bill of quantity wording

Bespoke flashings and baffles for curtain walls/panel clad walls by Cavity Trays of Yeovil, Somerset. BA22 8HU.

(01935 474769). Schedule provided by Cavity Trays Ltd.

## ordering/regulations

See inside back cover.

## related products and applications

See also arresting barriers and Type G cavitrays for damp protection.

See cavicloaks for traditional cavity wall damp control. See Type CFIS for cavity barriers/fire stops/compartmenting. See Type PWIB for combined DPC and fire barrier/compartmenting.

The lower end of each vertical cavity baffle terminates above each horizontal at an angle to match the horizontal profile whilst maintaining a free air space to promote pressure equalisation.

