

TECHNICAL INFORMATION

CONSTRUCTION JOINTS, BAY SIZES AND EDGE DETAIL TOPFLOW

Topflow Screed A is suitable for application to all structural substrates demonstrating an excellent degree of dimensional stability (max shrinkage/expansion while drying of 0.02%) when compared to traditional sand cement based screeds.

MAXIMUM BAY LENGTH - UNHEATED

Floating on Insulation	Min 40 linear metres
Unbonded on Polythene	Min 40 linear metres
Bonded	Min 40 linear metres
Underfloor Heating	Min 20 linear metres

MAXIMUM BAY SIZES

Floating on Insulation	1,000m ²
Unbonded on Polythene/Visqueen	1,000m ²
Bonded	1,000m ²
Underfloor Heating	300m ²

ASPECT RATIO

Unheated Max	8:1
Heated Max	6:1

EDGE DETAIL

The perimeter strip recommended for use with Topflow Screed A is a minimum 8mm (10mm with underfloor heating) closed cell polyethylene with an attached polythene skirt, this thickness relates directly to the maximum allowable positive movement within the screed.

40m - Bay Length x 0.02% Max Expansion  8mm - Expansion zone

As with all types of screed a joint must be formed above all structural movement joints.

On larger pours the following guidelines may be of use when considering the layout of any day-work or bay joints during screed placement.

NORMAL SCREEDING CONDITIONS

A bay joint is required at this position as the total screed area is in excess of 1,000m². NB: As with all types of screed a joint must be formed above all structural movement joints.



UNDERFLOOR HEATING

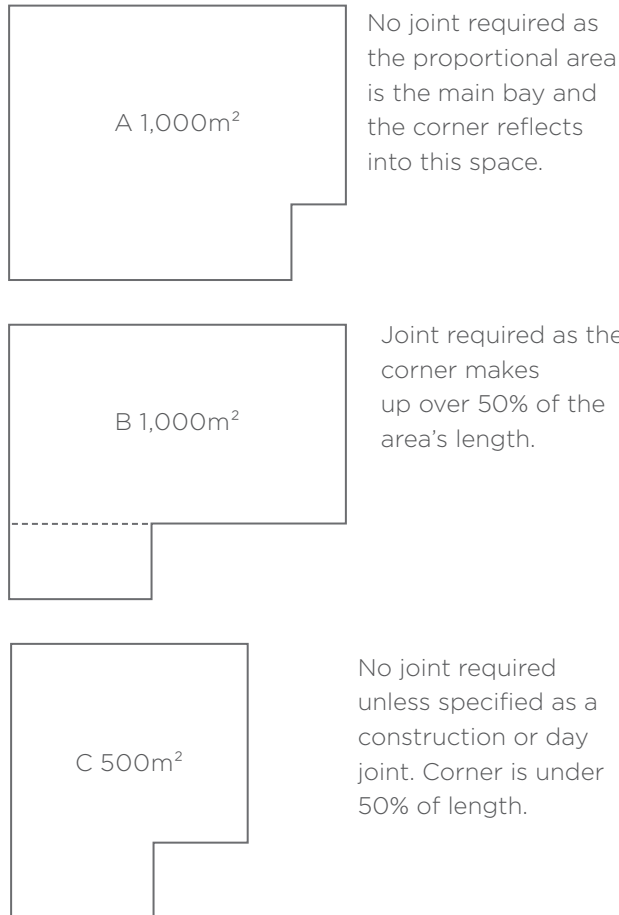
Tarmac recommends that the maximum bay size when used in conjunction with underfloor heating is 300m². However, it is important to note that a joint should be present between two independent heating zones and door thresholds to allow for thermal movement within the screed and differential temperature gradients.

NB: Consideration should be given to additional joints between heated and unheated areas and areas of high thermal or solar gain.



BAY LAYOUT

It is also necessary to note that the shape of the room can also affect the requirements for bay joints. The following guidelines highlight our recommendations with regards to placement of joints in relation to the shape of the room and area screeded.



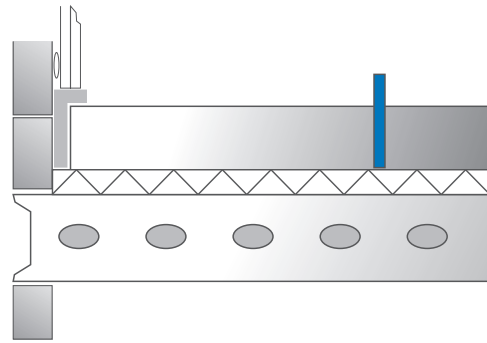
SCREEDING CORRIDORS

Please refer to aspect ratio table.
N.B. Corridor returns may require an expansion joint.
Please contact the technical team for information.

JOINTS

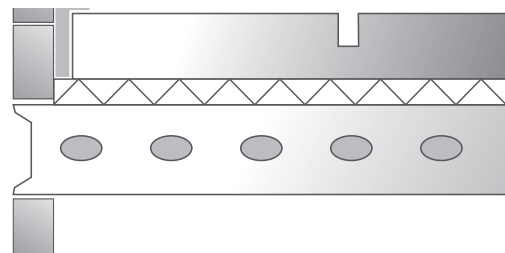
Expansion joints can be made using preformed 8 or 10mm closed cell polyethylene foam with a self adhesive t-bar base. Joints may be needed due to large areas, or in between underfloor heating circuits. This detail is particularly well suited to underfloor heating as it eliminates cutting the screed.

PREFORMED JOINTS



- Insulation, DPM and edge detail installed as normal
- Joint strip attached to DPM where expansion joints are required using self adhesive base, they should also be secured using additional screed tape to improve bond
- Where the strip meets either walls or door frames these joints should be sealed using tape
- Once the screed has cured the joint, strip can be trimmed to screed level using a suitable knife

SAW JOINTS



- Contraction joints can be cut into the screed following its installation.
- Insulation, DPM and edge detail installed as normal
- Saw cuts should be formed as early as possible following the screed being installed (2-3 days)
- Saw cuts should be made to half the screed's depth using a floor saw with suitable blade
- Saw cuts should be a minimum of 5mm wide
- Joints can be filled using a flexible epoxy sealant
- **NB: Saw cut joints should be avoided when using underfloor heat**

For more details contact
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