

These instructions should be read in conjunction with the contract specification and drawings. They are intended to provide guidance in normal installation situations and are addressed to the installer on site. They do not seek to address design matters; they do not seek to address unusual installation circumstances. If in doubt, consult ABG for further advice.

Description

ROTAGRID T is a pavement reinforcement system comprising a coated glass fibre grid laminated to a non-woven geotextile. It is installed within bound bituminous pavement layers.

Equipment required

Disc saw. Scissors and/or a sharp knife. Spring balance of 12 to 20 kg capacity.
Vacuum sweeper. Equipment for spraying bond coat at required rate.

Important!

Existing surfaces must be thoroughly cleaned of dirt, dust, or any other loose debris which may prevent proper adhesion to the substrate.

Do not remove protective packaging until immediately before use. ROTAGRID T rolls can be cut to required width with a disc saw; do not inhale dust. Small pieces can be cut or shaped with scissors or a sharp knife. The minimum recommended width of a strip is 0.5 m and the minimum distance from the edge of roll to a longitudinal joint or crack should be 0.75 m.

Installation

1. Pot holes should be filled and properly compacted. Cracks greater than 5 mm wide should be filled with a suitable bituminous material. Loose slabs should be stabilised or grouted.
2. Surface temperature should be 3°C minimum. ROTAGRID T should not be installed in frosty or freezing conditions or during heavy rainfall.
3. Ascertain direction of paving and determine order of laying. Anchor the trailing edge of the first ROTAGRID T rolls using nails and washers or bitumen emulsion, place a bar through the centre of the roll and pull the ROTAGRID T to unroll so that it is tight and flat.
4. All overlapped joints in the ROTAGRID T must be laid in the direction of paving such that the paving machine and delivery vehicles cannot lift them. The recommended transverse overlap width is 100 to 150 mm and longitudinal overlap width is 200 to 300 mm.
5. On shallow bends, small tucks can be formed. These should be cut and laid flat. On tight bends, cut and lay in a series of straight chords. Ensure laps are laid in direction of paving.
6. Prior to overlaying ROTAGRID T, perform a pull off test and ensure readings sustain a minimum of 9kg. The method of test is to insert a spring balance under the ROTAGRID T at a junction of long and cross strands, pull upwards until the ROTAGRID T mesh starts to lift from the surface and record the result in kg. The minimum recommended adhesion is 9kg. If readings of less than 9kg are recorded do not pave and investigate the cause.

7. A bond coat is required beneath ROTAGRID T. The recommended spray rates are (see Note 5):

Grade	K1-70 Emulsion	Pure Bitumen
ROTAGRID T50	1.5 l/m ²	1.2 l/m ²
ROTAGRID T100	1.5 l/m ²	1.2 l/m ²
ROTAGRID T100/200	1.5 l/m ²	1.2 l/m ²

8. Bitumen emulsion may be applied to damp surfaces but standing water must be removed. Alternatively pure bitumen may be sprayed but it must be applied to a completely dry surface.

Notes

1. Unnecessary driving over Rotagrid should be avoided. Clean away any mud or debris.
2. Rotagrid may be overlaid whilst damp, but any standing water must be removed.
3. Overlays can be laid to normal specifications, temperatures and compaction.
4. Rotagrid must not be exposed to direct sunlight for more than 14 days.
5. Spray rates may need to be adjusted depending on surface porosity.