

MicrAtec NS series: Control Joints



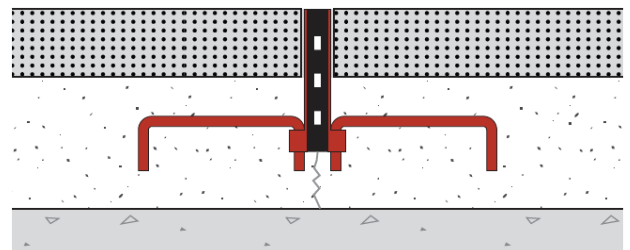
Movement control joints between semi-dry bed affixed tiles using NS Joints. These joints are installed as part of the tile laying process. The method of fixing NS joints depends upon whether tiling is being:

- Adhesive fixed on to a pre-laid screed (screed affixed)
- Bedded - such as on a semi-dry bed (bed affixed)

Screed Affixed:

1. When the screed is being laid, a wooden batten, 100 mm (4") wide and sufficiently deep to accommodate the proposed joint, is placed where the joint will eventually run.
2. When tiling has commenced and reached a point close to the joint position the batten is removed and a stress relieving sawcut 2mm to 3mm wide is tracked in the screed down to the concrete base.
3. A bonding cement such as Arducem B2 or equivalent should be applied to the sides and bottom of the rebate providing that such surfaces are sound, strong, free of dust, grease, oil and other barriers to adhesion.
4. While this slurry coat is still wet a levelling layer of rapid setting cement (such as Arducem EB2 or equivalent) and sand mortar should be applied to the base of the rebate, sufficient such that when the joint is placed on top of the bed that it protrudes approximately 10mm above the surface of the surrounding tiling - see figure 54. The layer of rapid setting cement should be laid in accordance with the manufacturers instructions and firmly tamped down prior to installation of the joint.
5. The joint is carefully placed on the levelling bed and tapped gently downwards until the top of the joint is flush with level of the surrounding tiling. The joint should also be carefully aligned to coincide with tile layout.

6. Wire ties (NS and ND only) are pressed into the loops (position of loops which are embedded should be clearly visible in the pre-tamped levelling bed) and the remaining rebate backfilled with rapid setting cement and sand mortar. This should be firmly tamped down ensuring always that the position of the joint is not compromised and that the rapid setting mortar is flush with the surface of the surrounding screed. It is important that the slurry coat is still wet and workable as this will ensure a high integrity of bond between the existing screed and the rapid setting cement and sand infill.
7. Normally rapid setting cements can receive ceramic tiles after 3 hours at 200C, however the manufacturer's recommendations should be sought and closely followed.



MicrAtec NS – Method Statement

Bed Affixed (excluding adhesives)

Tiles may be bedded using a variety of bedding mixtures employing cement and sand mortar, cement and sand semi-dry mix or cement with lime and sand mortar. In all these instances the movement joint is affixed as part of the bedding process.

1. Using, for example, a semi-dry cement: sand mix, the mix should be spread, partially compacted and slurried.
2. The tiles are placed in the slurried bed and to compact the bed, firmly beaten into position with a rubber mallet.
3. When tiling has reached a point close to the joint position the bed is drawn back and the joint placed in position. The joint is carefully aligned for accuracy. A tile may be used as a gauge to determine joint straightness. The joint should be left 2 or 3mm above the level of the surrounding tamped paving.
4. The bed and slurry layer may now be infilled and tiling continued. The joint should be tamped down level with the top of the surrounding paving.
5. The only exception to this is paving (marble, terrazzo etc) which is to be polished after laying. In this event the joint may be left 1 or 2mm above the paving and will polish down flush with the top of the tile.
6. It is obviously impossible to create a stress relieving saw-cut underneath a joint fixed in this way. It is therefore critically important that a sufficiently deep joint is employed if such a fixing method is used.
7. A joint of sufficient depth (i.e. at least two thirds of the depth from the bottom of the tile to top of concrete base - see Architectural Specification) will act as a crack inducer in the bed. This crack inducing effect will cause fractures to occur at areas of weakness in the bed - where the bed is shallowest - i.e. underneath the joint.

