

MOVEMENT JOINTS PROFILES

Movement joints are an integral part of any tile assembly. The various components of a tile assembly (tile, mortar, substrate, etc.) expand and contract according to each component's intrinsic physical properties with changes in moisture, temperature, and loading, resulting in internal stresses.

Furthermore, structures that restrain overall expansion of the tile field (walls, columns, etc.) cause stress buildup within the system.

If the aforementioned movements are not accommodated through the use of movement joints in the tile field and at restraining structures,

the resulting stresses can cause cracking of the grout and tile and delamination of the tile from the substrate.

Thus, movement joints are an essential component of any durable tile assembly. MTgroup-Systems' prefabricated movement joint profiles accommodate movement and protect tile edges, resulting in a permanent, maintenance-free installation.

The family of MTgroup profiles prefabricated movement profiles includes a variety of shapes, sizes, and materials to suit different applications.



Application and Function

► Mortar Bed Joint Profiles – Type 1

MTgroup joint profiles (type1) are designed to Provide movement joints in tile installations that are set in a mortar bed (e.g., ceramic tile, natural stone, pavers, and agglomerate tile). These profile systems are placed to produce individual fields in the assembly and feature flexible central zones to accommodate movement.

MTgroup mortarbed joint profiles may also be inserted insaw-cut joints or wider joints; for example, in the case of renovations.



The remaining joint between the tile and the profile must be filled completely with grout or epoxy.

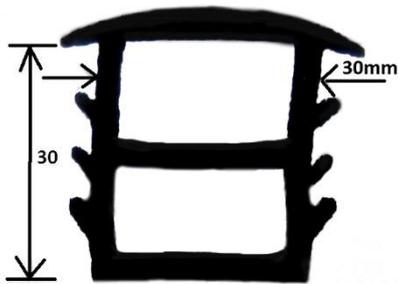
The side sections of the profiles, made of rigid PVC, protect the edges of the adjacent covering against mechanical stresses caused by industrial traffic.

However, where heavy mechanical stresses are anticipated, limitations of the PVC as edge protection must be considered. MTgroup joint

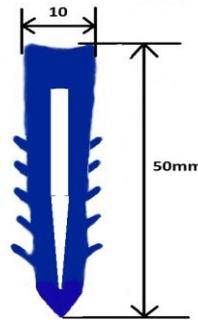
profiles (type1) is available in three different heights and features stable serrated sidewalls made of rigid PVC and a central movement zone made of soft PVC.

The side sections are made with environmentally friendly recycled PVC and may vary slightly in color.

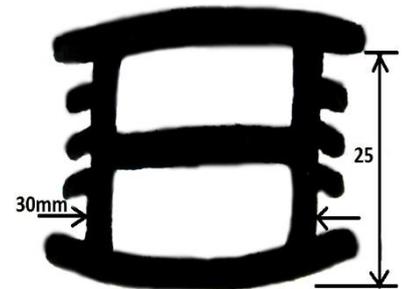
Since the side sections are partially exposed at the surface, also is intended mainly for industrial use.



MTgroup Movement Control Joint



MTgroup Movement Control Joint



MTgroup Movement Control Joint

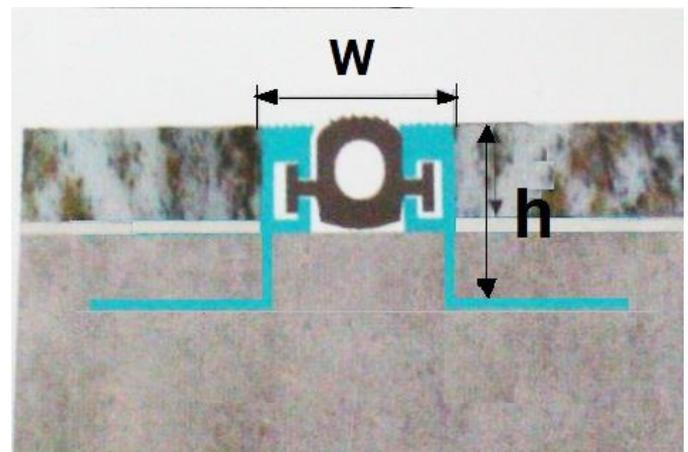
► Surface Joint Profiles - Type 2

Surface joints must be placed within the tiled surface regardless of substrate conditions.

They provide stress relief from movements in the tile field due to thermal and moisture expansion/contraction and loading.

MTgroup Systems offers a wide variety of prefabricated, maintenance-free surface movement joint profiles, suitable for applications ranging from residential to heavy commercial.

MTgroup joint profiles (type2) features made of aluminum, which are secured in the mortar bond coat and provide edge protection for adjacent tiles.



The profile separates individual fields in the tile covering and accommodates movement via the 1/4" (6 mm)-wide, soft PVC movement zone, which also forms the visible surface.

The soft PVC movement zone is connected to the anchoring legs with rigid PVC grip bars and is not replaceable.

Also is suitable for both residential use and medium-duty commercial applications, such as areas subject to moderate mechanical stresses, including light vehicular traffic.

In addition, prevents sound bridges, making it ideal for use in sound-rated floors.



Material Properties and Areas of Application

Anodized aluminum profiles feature an anodized layer that retains a uniform appearance during normal use.

The surface, however, is susceptible to scratching and wear and may be damaged by grout or setting material. Therefore, these materials must be removed immediately.

Otherwise, the description regarding aluminum applies.

textured color-coated aluminum is pretreated (chromated) aluminum that is color-coated with a polyurethane powder coat. The coating is color-

stable, UV-resistant, and suitable for exterior use. Protect the profile against abrasion or scratching.

Thermoplastic rubber inserts are highly resistant to chemicals and can withstand chemical stresses typically encountered in tile coverings.

The insert is resistant to aging, weather, UV-rays, and ozone within a temperature range of -76 °F (-60 °C) to 212 °F (100 °C). Thermoplastic elastomers can be connected by welding if profiles are joined to produce longer lengths.

Installation

► Mortar Bed Joint Profiles – Type 1

1. Select profile height according to the height of the assembly.
2. Set the profile flush against the edge area of an already completed field. The profile must be completely embedded laterally.
3. Install tiles for the adjacent field flush to the profile surface. The profile must be completely embedded laterally.

4. Fill the remaining joint between the profile and the covering completely with grout or setting material.

Installation note on joint repair:

Prepare the joint's width and depth appropriately and insert profile into joint. Fill joint space between profile and covering completely with grout, epoxy, or thin-set mortar.

► Surface Joint Profiles - Type 2

1. Select profile according to tile thickness.
2. Using a notched trowel, apply thin-set mortar over the area where the profile is to be placed. The profile must align directly with movement joints in the substrate below.
3. Press the perforated anchoring legs of the profile into the mortar and align.
4. Trowel additional thin-set mortar over the perforated anchoring legs to ensure full coverage and support of the tile edges.
5. Solidly embed the tiles so that the tiled surface is flush with the top of the profile; the profile should not be higher than the tiled surface, but rather up to approx. 1/32" (1 mm) lower.
6. A joint of approximately 1/16" - 1/8" (1.5 - 3 mm) should be left between the tile and the profile.
7. Fill the joint completely with grout or setting material.

Maintenance

MTgroup profiles require no special maintenance or care and are resistant to mold and fungi. Clean profile using common household cleaning agents.

In the case of anodized aluminum and textured color-coated aluminum do not use abrasive cleaning agents. The thermoplastic rubber inserts in MTgroup joint profiles (type2) are replaceable.

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