



TEKFON 10

An extruded polyethylene sheet material available in rolls.



OVERVIEW

TEKFON 10 is an extruded polyethylene sheet material available in rolls.

TEKFON 10 has been designed specifically to acoustically "isolate" the transmission of structure borne vibrations (sound) between solid elements. Its closed cell structure is ideal at "cushioning" the vibrations.

TEKFON 10 is used under a screed in conjunction with a suitable isolating perimeter strip to provide acoustic separation between screed and structure.

TEKFON 10 has been designed to meet the requirements for a resilient layer below a screed in separating floors with either traditional or liquid screeds.

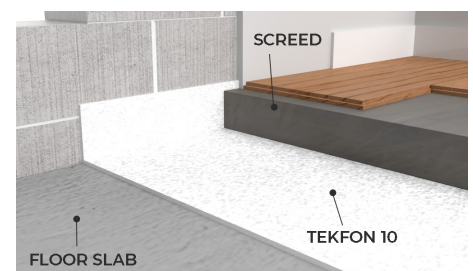
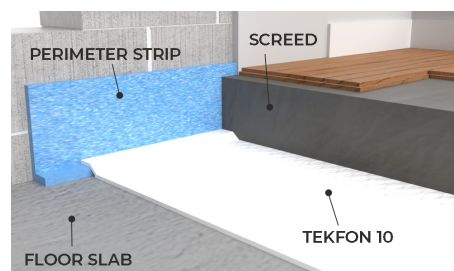
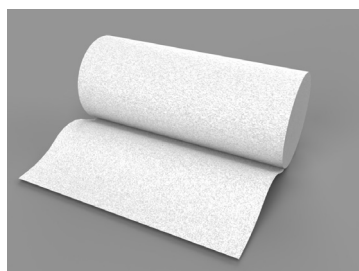
TEKFON 10 has been engineered to comply with Building Regulation requirements for resilient layers in separating floors and can be used with a variety of structures and different screed types.

MATERIAL

Thickness	10mm
Colour	Grey
Roll size	1500mm x 40m
Roll weight (handling)	Approx. 18kg per roll
Density	Approx. 30kg/m ³

HEALTH & SAFETY

No protective clothing is necessary to handle TEKFON 10.



BENEFITS

- Excellent acoustic performance
- Very good compression resistance under load
- Light and easy to handle
- Easy to install
- TEKFON 10 is CFC and HCFC free

SUBSTRATES

TEKFON 10 can be applied over any suitably smooth substrate.

Care should be taken to ensure that the surface of the substrate is free from sharp steps, ridges, sharp points or foreign objects (such as stones) that could provide localised compression or puncturing of the material.

Such "pinch points" can dramatically reduce the acoustic benefits of TEKFON 10.

PERIMETERS AND JOINTS

It is extremely important that the resilient layer provided by TEKFON 10 should be continuous and should isolate the screed not just from the floor slab, but also from any hard part of the structure. This can be achieved either by using purpose designed perimeter strips of equivalent material or by simply "turning up" the TEKFON 10 at walls and columns etc.

Where it is necessary to make a joint between rolls of TEKFON 10 it is essential that this does leave any gap that could create an acoustic "bridge". Ideally the material should be lapped by 75mm and taped. Where screed thickness does not allow this, a butt joint can be used but it must be tight, taped and not contain gaps.

ACOUSTIC DATA / TESTING

In order to obtain site data (rather than relying purely on laboratory based information), two projects with differing constructions were tested. Both projects were installed normally by screeding contractors with no additional supervision or instruction. Test areas were selected at random.

EXAMPLE PROJECT 1

Material	Thickness	Surface Mass (kg/m ²)
Anhydrite flowing screed, including underfloor heating pipes	55mm	110
EPS insulation	50mm	-
TEKFON 10	10mm	3.6
Reinforced poured concrete	215mm	300
Cavity	195mm	-
Plasterboard ceiling	12.5mm	8
Skim	2.5mm	-

RESULTS: Building regulations require that the impact sound performance of the floors should be no greater than 62 dB. The target requirement for this project was 5 dB better than this at 57 dB. Two floors were tested. The measured values of the weighted standardised impact sound pressure level L_{nt,w} were 46 dB and 42 dB respectively. These substantially exceed the requirements of the Building Regulations and the enhanced project requirements.

EXAMPLE PROJECT 2

Material	Thickness	Surface Mass (kg/m ²)
Mesh reinforced traditional screed	65mm	110+
TEKFON 10	10mm	-
Reinforced poured concrete	225mm	550
Cavity	146mm	-
Cavity	12.5mm	10
Skim	0.5mm	8

RESULTS: The target was again to achieve an impact sound rating of 5 dB better than the building regulations at 57dB. One floor was tested. The value of the weighted standardised impact sound pressure level L_{nt,w} was 52 dB. This substantially exceeds the requirements of the Building Regulations and the enhanced requirement. These results relate specifically to the exact constructions as tested but, in view of the high levels of performance achieved, it can be concluded that TEKFON 10 provides an effective resilient layer and thereby acoustic isolation. It would naturally follow that TEKFON 10 could reasonably be specified wherever a resilient layer is required in order to comply with the requirements of Part E.

WARNING

Whilst the information provided in this datasheet is true and accurate to the best of our knowledge, it may contain information which is unsuitable under certain circumstances since materials, site conditions and method of application vary with each application.

TEKCEM LTD cannot be held responsible for any loss or damage due to incorrect use or from the possibility of variations in working conditions and/or workmanship beyond our control. The user alone is responsible for any consequences deriving from the product.