OBEX™ | Milliken™ Entrance Flooring

OBEX™ Grid Installation Guidelines

Overview

OBEX™ Grids (Vinyl, Mono, and Cut) are available in two variations (Open or Closed) and two thicknesses. The 11mm thickness is ideal for recessed areas from 10-12mm depth, or surface mounted installations. Grids in 11mm thickness can also be installed alongside many other floor covering products of similar thickness without a nosing or transition. The 16mm thickness is ideal for recessed mat wells with a depth of 17mm.

All Grid products can be surface mounted with an adapted edging system (PVC connector edging or aluminium ramped profile, see edging section for details.)

All Grids have a heel proof construction to prevent heels from being trapped and are designed to comply with requirements contained in DDA and BS 8300: 2001 and ADA.

Grids are pre-assembled in units of 6 and are easy to disconnect by hand to get individual pieces.

Intense traffic conditions above 3,000 people per day

In case of intense traffic above 3,000 people per day, it is recommended that grids in 11mm or 16mm closed construction are bonded to the subfloor with a permanent adhesive, please see adhesive section for glue recommendations.

Heavy wheeled traffic

All OBEX modular grids are designed to accommodate high levels of foot and wheel traffic, commonly experienced in locations such as shopping centres and airports.

In cases where heavy wheeled traffic operates, more than 100 kg per load point, we recommend installing the 16mm product which is specifically designed to cope with such extreme conditions.

The 16mm product can withstand loads up to 35kg/cm^2 with minimal deformation and can recover from deformation from loads up to 144kg/cm^2 within 6 hours. This accommodates the use of equipment such as Mobile Elevated Work Platforms (MEWP), Fork Lift Trucks (FLTs), vehicles with pneumatic tyres such as motor cars and vans, and other access equipment. Note - specific point loadings need to be referenced against the above specification.

The back of these grids features a special structure designed for strength, and to provide good contact with the subfloor and any adhesive that may have been used.

If the architecture does not allow the use of 16mm tiles, and the installation is done with 11mm grids, then the total area should be glued to subfloor to cope with heavy wheeled traffic. Gluing the product to the subfloor will allow it to cope with heavy wheeled traffic.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Temperature considerations

During installation, it is recommended that the grids are normalised to a temperature between 15°C to 25°C before installation. This ensures accurate sizing for the install and proper function of the connectors.

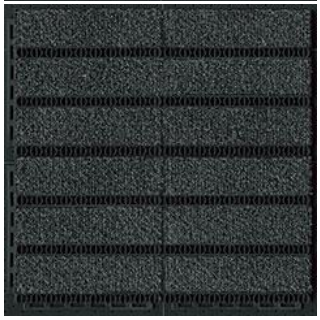
After installation, the grid area may expand or contract slightly when the product is exposed to extremes of temperature. The larger the installation, the larger the overall dimensional change, and it is advisable to split up larger installations with T-bar accessories.

The OBEX™ Grid products have been tested to assess the level of expansion and contraction due to temperature variation. Expected dimensional change result from normal of less than 1%. To allow for this movement, it is important to leave a small gap around the edges of the install (+/- 3mm). This can be either filled with a flexible sealant or hidden under the edging/skirting.

Product

OBEX Grids come in distinct products (Vinyl, Mono, and Cut) and two variations (11mm Open and Closed). Typically, the Closed versions are used recessed indoor, the open versions are used in exterior surface applications or indoors in a recess with a drain. All product come packed 30 pieces per box and connections are simple 'hammer together' design.

OBEX Grid Vinyl



OBEX Grid Mono

OBEX Grid Cut

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Recess / Subfloor Preparation

Ensure the subfloor is level and clear of any loose material.

Repair any large area of damage.

If necessary, screed up the recessed area when the depth is more than 11mm.

Following reparations, make sure the area is clean and clear of debris.

Use a levelling compound or latex-based product to ensure a good surface for the installation.

Additionally, a tackifier or adhesive can be applied at this point for installations subject to heavy or wheeled traffic.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Tools require for Installation

Cut resistant gloves
Hammer or mallet
Carpet knife
Measuring tape
Steel ruler or straight-edge

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Installation of OBEX™ Grids

Measure the area, mark a centre line, and set out the product loosely before beginning the install.

Make sure there is enough product from the same batch. It is important to not mix batches, there might be colour variation.

The tiles connect to one another easily, with the use of a hammer or mallet enabling quick installation.

The edges of the installation should be the last to be installed.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

The OBEX™ Grids are designed to be cut with a sharp knife. Mark the required measurement point using tape and knife.

Line up the straight edge with the mark and make the cut. For the outer part of the install, use the edge of the recess to align the straight edge.

Note – connecting pins should be removed if the install finishes with a full tile, to give a clean finish to the edge.

Make sure the installation has room to allow for expansion and contraction to ensure the tiles are flat and level.

Depending on the ambient conditions, it might be necessary to leave a small gap (1.59mm or 3.16mm) where the installation meets a wall or recess edge.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Another option is to cut in under the skirting boards, as would be the preferred method when laying solid flooring, for example.

Accessories such as T bars are also available to help divide an install, whether for separating product types or to allow for expansion and contraction in large installs.

Speak to your sales representative for details.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Curved or Odd-Shaped Installations

Assess whether the product previously installed (if available) can be used as a template. If not, use stiff cardboard or material to make a template of the area.

For areas such as revolving doors, if a template cannot be made, measure the exact diameter of the recess and then transfer this measurement on to pre-assembled grids to make the cut. Alternatively, the same method as used for a 'normal' recess can be used, placing a sheet in the marked centre and working out from there to the edges, where a manual cut aligned with the edge can be made.

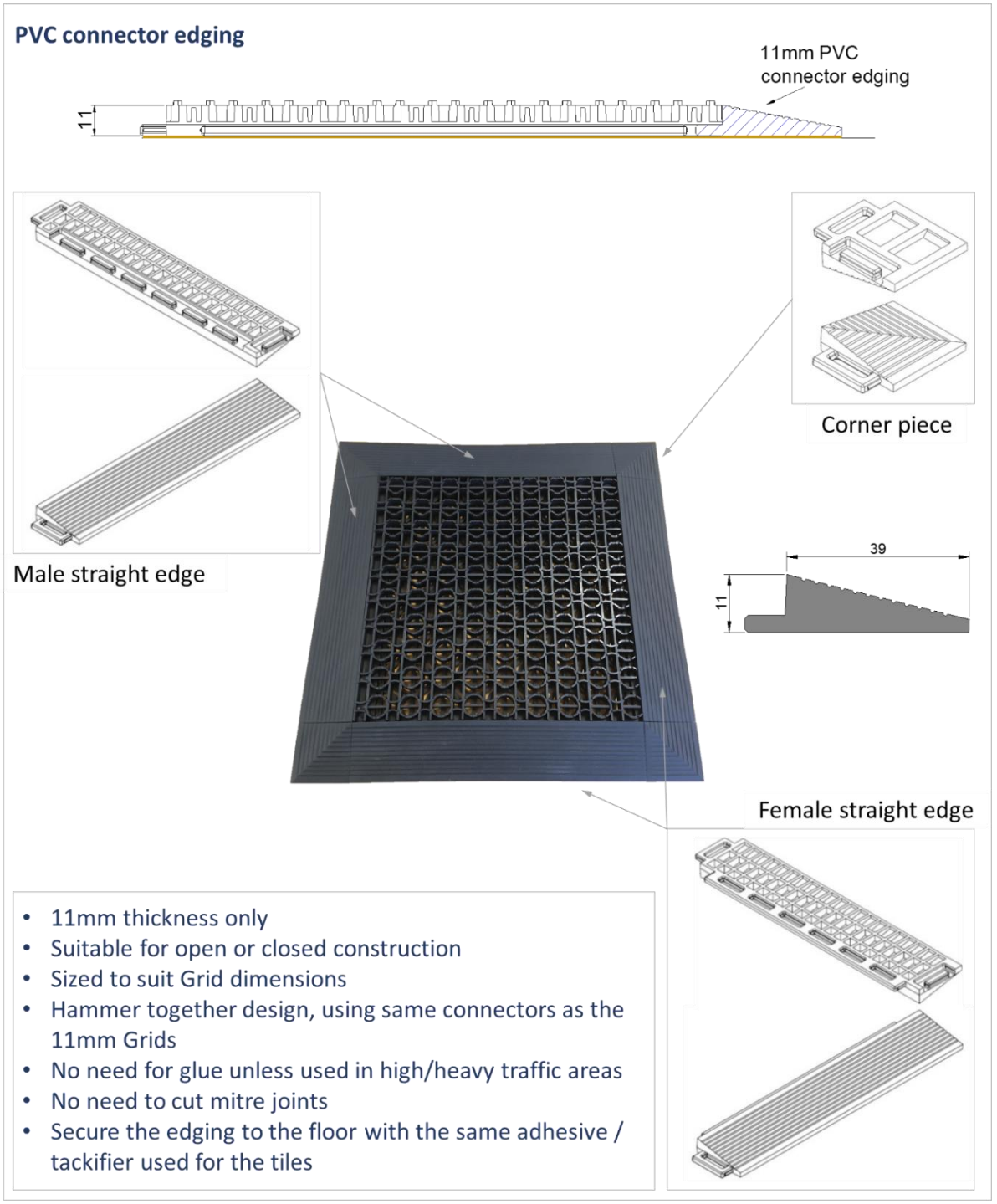
General note – avoid leaving the connectors showing at the edges of the recess. These should be cut off to leave a clean finish. Ensure subfloor is level, sound and free of contaminants such as grease. If greasy, clean with degreaser and prime using neoprene primer. Use levelling compounds or latex if necessary. It may also be necessary to screed up recess to achieve the desired depth.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Accessories

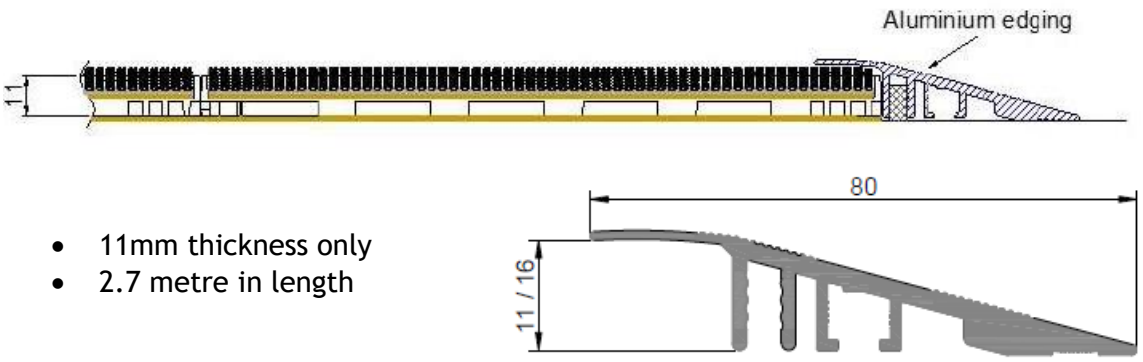
Edging systems – PVC connector edging



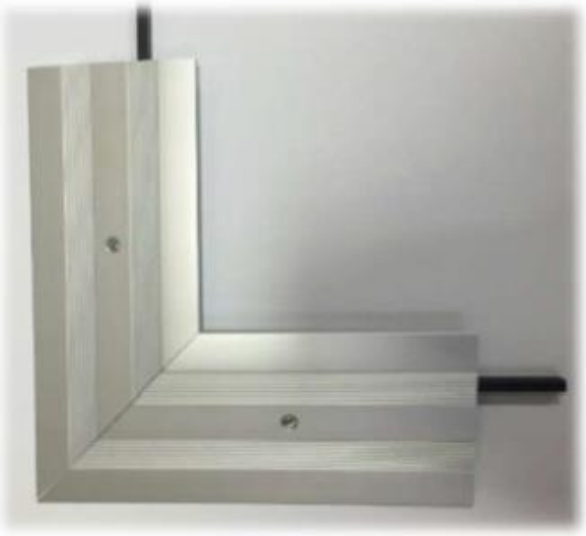
For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Edging systems – 11mm Aluminium edging



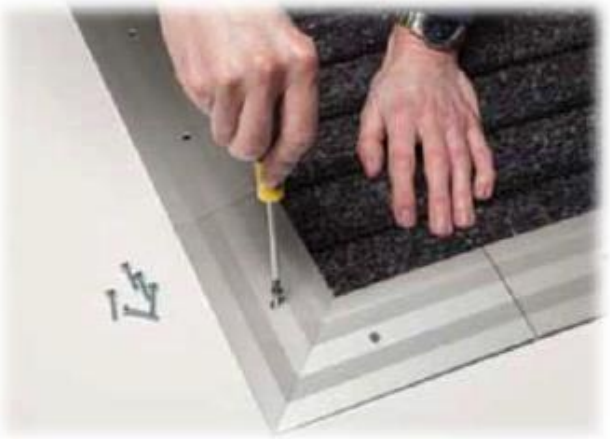
- 11mm thickness only
- 2.7 metre in length



Pre-assembled corner pieces avoid mitre cuts on site

No glue required to attached corner pieces – connection pieces underneath the edging

Cut Straight sections to length with and suitable saw (hacksaw, mitre saw etc.)

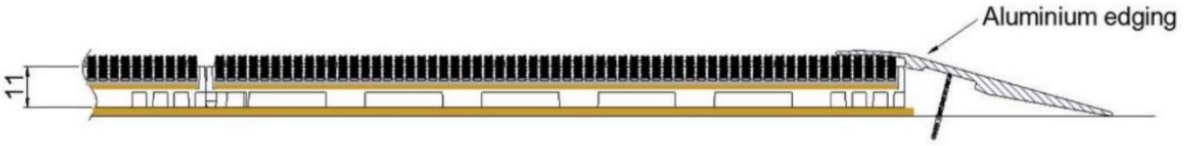


Edging must be fastened to subfloor to ensure stability

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

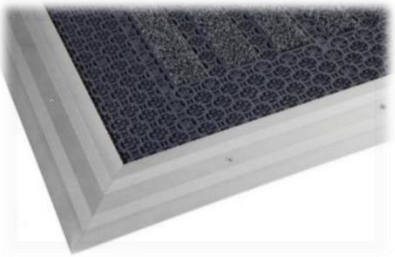
Edging systems – Universal Aluminium edging



- Allows for use with OBEX Grids between 8 – 16mm thickness
- 2.7m in length

The edging rests on top of the edge of the Grids and fixes to the floor, providing the required angle of installation.

Cut straight sections to length with a suitable saw. (hacksaw etc...)



Use a mitre block or cutter to create the angle for the edging to join at the corners.

The edging must be fastened to the subfloor to ensure stability (fastener not included)

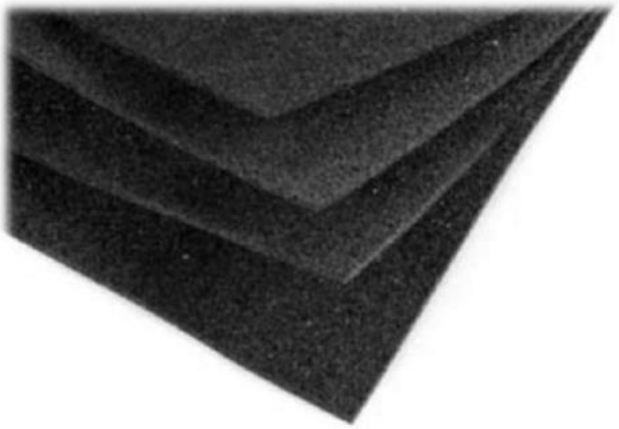
For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Accessories – Underlay

ECOFLEX® UNDERLAY

- Easy to use for mat well depth compensation
- 4mm thickness
- Available in sheets of 40cm x 60cm to suit OBEX™ Grid sheet size
- 30 pieces per box (=7.2 m² per box)
- Cut to size with a knife
- Made of recycled materials



For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com

OBEX™ | Milliken™ Entrance Flooring

Adhesive Recommendations

When using the PVC connector edging in high traffic areas it is recommended to glue the underside of the connector to the grids. This will eliminate the opportunity of separation. We recommend a cyanoacrylate glue to be used along the full length of the edging to adhere to the tiles, and on the joins (straight and corners). An alternative glue recommendation is a PVC to PVC adhesive, such as Gorilla Glue. This is supplied with an applicator suited to applying the adhesive.

Manufacture	UZIN	BOSTIK	MAPEI
Release bond (Glue stays soft when dry – allowing easy product release)	Universal tackifier	-	Ultrabond Eco 810
Permanent bond (Glue becomes hard when dry – making product release difficult)	KR430 KE2000S	PowerElastic GreenFusion 2	Ultrabond G 21 Ultrabond Eco 560 Ultrabond G 19

Note: Milliken and Company and its Flooring Division are not responsible for the use and applications of these products, and for potential direct or consequential damage that could occur during or after product installation. Please refer to the adhesive manufacture's product and safety datasheets for information.

For answers to questions about OBEX™ maintenance procedures, please contact:
Milliken Europe on: +44 1942 612999 or protectiveflooringeurope@milliken.com
Milliken Asia Pacific on: +8621 6145 5555 or matsordersasiapacific@milliken.com