## Basement Ceiling Insulation Board 3647



035 DI, "normalentflammbar" (flammable), with groove and tongue and chamfered visible edges

Field of application	
	Hard foam insulation board for insulating basement ceilings to improve thermal insulation. In conjunction with Qju Adhesive Foam 3700 and Qju Fixing Bracket 3701 for extremely efficient, clean and reliable insulation of basement ceilings.
Properties	
	<ul> <li>Basement ceiling insulation boards made from expanded polystyrene hard foam in accordance with DIN EN 13163</li> <li>With pore structure, white surface</li> <li>not burning dripping</li> <li>Groove and tongue + chamfered visible edges</li> <li>Diffusible</li> <li>Aging-resistant</li> <li>Easy to apply</li> </ul>
Material description	
Rated thermal conductivity $\lambda_{\text{B}}$	0.035 W/(m·K) in accordance with DIN 4108-4
Rated value of the thermal conductivity $\lambda_{\text{D}}$	0.034 W/(m·K) in accordance with DIN EN 13163
Reaction to fire	"normalentflammbar", flammable (Euroclass E in accordance with DIN EN 13501-1)
Water vapor diffusion resistance value μ	30/70 in accordance with DIN EN 12086
Raw density	Approx. 20 kg/m³ and 23 kg/m³ in accordance with DIN EN 1602
Length and width tolerance	± 3 mm/m
Thickness tolerance	± 2 mm
Board planarity	± 5 mm/m



Material description	
Edge formation	With groove and tongue
Insulation board format	Length: 50 cm / Width: 50 cm (Working dimension: 48.8 cm / 48.8 cm)
Thicknesses/packaging	Insulation board thicknesses $m^2$ per pack5 cmca.6 cmca.8 cmca.30 m²10 amca.
	12  cm ca. 2,0 m <sup>2</sup>
	14 cm ca. 1,5 m²
	Further insulation board thicknesses on request.
Storage	
	Store in a dry place and protect from moisture. Do not leave it unprotected and exposed to intensive sunlight for an extended period of time.
Use	
Substrate preparation	The substrate must be level, solid, dry, clean, load-bearing, and free from efflorescences, sintered layers and separating agents. Chip off projecting mortar or concrete parts. Remove major substrate unevennesses mechanically or even out with plaster in accordance with EN 998-1 (CSII, CS III, CS IV). Check existing plaster for solidity and cavities; check existing coatings for load-bearing capacity. Remove non- load-bearing plaster and coatings completely. Prime substrates with Lacryl Deep Penetrating Primer ELF 595, if required. See also VOB Part C, DIN 18363, Section 3.
Definition of the joint layout	Before bonding, the desired joint layout must be agreed with the client and the ceiling area must be divided into a suitable grid. The first row should then be bonded along a marked line.
Bonding	In the Qju-Up bonding technique with Qju Adhesive Foam 3700 and Qju Fixing Bracket 3701 An insulation board thickness of $\geq$ 50 mm is required for using the Qju- Up bonding technique with Qju Fixing Bracket 3701. When bonding the first row, support the insulation boards in the edge area on the wall with Qju Fixing Bracket 3701. To do this, glue the bracket to the wall at a distance of the insulation layer thickness plus adhesive layer thickness. To ensure that the brackets can be removed again later, they are glued turned upside down (the bracket remains completely visible) and the protective foil is removed and reapplied so that approx. 50 % of the adhesive is covered in the area facing the ceiling. One bracket per insulation board is sufficient. For a closed joint pattern, cut in to (notch out) the Basement Ceiling Insulation Board 3647 at the designated fixing point to hold the Qju Fixing Bracket 3701. This cut is carried out with a cutter knife before the adhesive application. For bonding, apply the Qju Adhesive Foam 3700 all around as a strand and in the center as a dot, apply the insulation board and push in the groove and tongue (adhesive thickness 5–8 mm). Per insulation board, glue one Qju Fixing

fixing nails through the bracket.



Bracket 3701 to the ceiling, align the insulation board and insert the

Use	
Bonding	Further application information including figures can be found in the brochure "Qju-Up Basement Ceiling Insulation and Attic Insulation". Follow the instructions in the Data Sheet Qju Adhesive Foam 3700.With The Basement Ceiling Insulation Board 3647 can also be mounted on the pretreated substrate using the bonding technique with ETICS Powder Adhesive 3550. With this method, on a level substrate, the adhesive must be applied over the entire surface of the insulation board or substrate with a notched trowel, e.g. 10 x 10 mm. For uneven substrates, it is advisable to apply the adhesive using the dot method with 5 approx. palm sized lumps of adhesive on the rear side of the insulation board. This helps to level minor substrate unevennesses. The insulation boards with groove and tongue joins in a running bond pattern can be bonded either with offset joints or cross joints by sliding them slightly and applying slight pressure. In order to avoid thermal bridges, ensure a tight joint connection and proper, adhesive-free implementation of the insulation board joints.
Cutting insulation boards to size	Individual insulation boards can be cut to size with the ETICS Cutting Tool 105-30S 1463 or the Hard Foam Saw 3798. Further information can be found in the Brillux tool product range.
Anchoring	
	If the substrate is not adequately suited for bonding, a suitable anchor plate, e.g. ETICS Sunk Anchor STR U 2G 3811, must be used on every second board.
Notes	
Solvent-free priming	Polystyrene hard foam is attacked by solvents. Therefore, only solvent- free primers should be used.
Completion of other trades	Basement ceiling insulation boards should only be mounted once the other trades have completed their work (e.g. asphalt works, welding work etc.) to ensure the correct function and appearance of the ceiling areas.
Only use on the cold side of ceiling areas	If used on the warm side of ceiling areas, e.g. heated basements or commercial and industrial halls, there is a risk of rear dampness due to condensation. The basement ceiling insulation boards should therefore only be mounted on the cold side of ceiling areas (unheated basement or underground garage ceilings).
No further coating	For fire-protection reasons, the horizontally mounted insulation boards must not be clad or plastered over.
Further information	Follow the instructions on the data sheets of the products used.



This Data Sheet is based on extensive development work and years of practical experience. The translation corresponds to the current German version, in compliance with the German laws, regulations, standards and guidelines. Its content does not constitute a contractual legal relationship. The user/buyer is not released from the responsibility of checking our products to ensure they are suitable for the intended application. In addition, our general terms of business apply.

When a new version of this Data Sheet with updated information is published, the previous version no longer applies. The current version is available on our website.

Brillux Weseler Straße 401 48163 Münster GERMANY Phone +49 251 7188-0 Fax +49 251 7188-105 info@brillux.de www.brillux.com

