



Installation Instructions

DELTA® adhesive products:

- DELTA®-MULTI-BAND
- DELTA®-TIXX
- DELTA®-THAN
- DELTA®-ALPINA QSM
- DELTA®-FLEXX-BAND
- DELTA®-SCHAUM-BAND
- DELTA®-DICHT-BAND
- DELTA®-POLY-BAND
- DELTA®-PREN
- DELTA®-KOM-BAND
- DELTA®-BUTYL-BAND
- DELTA®-BAND

General advice

■ Whenever a pitched roof is built or refurbished, a wide range of requirements have to be considered: protection from wind and weather, from rain and drifting snow is as imperative as the need to keep the heat insulation permanently functional.

Especially seals, seams, and repairs demand impeccable quality which guarantees a maximum of safety down to the smallest detail: DELTA® offers a comprehensive range of adhesive products for each of the various applications of DELTA® insulation underlays, waterproofing sheets, soft sheathing, temporary roofing sheets, DELTA® draught and vapour barriers, DELTA® facing sheets, and DELTA® separation layers. In addition, the conditions and requirements specified in these instructions similarly apply to the application of accessories from the DELTA® adhesive products range in conjunction with products that are comparable to the above-mentioned DELTA® sheets, to the construction of draught and vapour barriers conforming to DIN 4108, to gluing suitable substrates, and to the implementation of additional measures conformable with the code of the German roofing trade. However, the descriptions given herein do not relate to gluing sheets made of recycled material and PE sheets containing chloroparaffin-based additives because these may exude on the surface.

Each and every product of the DELTA® adhesive range is sure to meet the most stringent demands in terms of adhesive strength, longevity, and ease and speed of handling.

Installation instructions for products

Suitable substrates

Products from the DELTA® adhesive range may be used for gluing and repairing DELTA® sheets on a wide variety of substrates including:

- mineral substrates (e.g. plaster, masonry, or concrete)
- rough-sawn and possibly cracked wood (e.g. solid-wood rafters or purlins)
- planed, largely crack-free wood or wood-based materials (e.g. glued laminated rafters or purlins, chipboard or OSB panels, window or moonroof window sections)
- metal (e.g. beams, sections, sheets, or pipes of iron, steel, aluminium, copper, or zinc). Metal surfaces must be bright. Plastics (e.g. window sections or pipes)

If the substrates that are to be glued together have been coated, painted, or similarly treated, this must not affect the durability of the seam. In addition, care must be taken to ensure that these surfaces do not peel off.

Preparations

Whenever any products from the DELTA® adhesive range are used, make sure that substrates are clean, dry, free from dust, frost, or grease (e.g. forming-oil or neck-grease residues) and sufficiently free from porosity.

Any substrate that is sandy, dusty, or porous or otherwise raises doubts about the achievable quality of the seam must pre-treated with a suitable primer. Whenever in doubt, run a bonding test. In addition, substrates made of wood or wood-based materials may be planed to ensure permanent bonding.

Bonding test

Products from the DELTA® adhesive range do not yet have their full adhesive strength immediately after application; rather, they develop it after a product-specific length of time, which is crucially influenced by the substrate, the temperature, and the relative humidity. This absolutely must be taken into consideration when running bonding tests or judging the setting time of viscous or liquid glues.

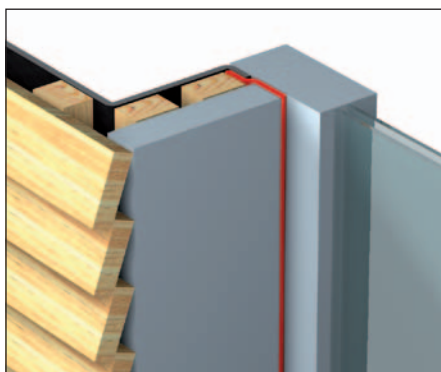


Products from the DELTA® adhesive range

Application

Product-specific conditions must always be given consideration with regard to storage, application, and setting. To ensure that the setting process is interfered with as little as possible, powerful mechanical influences (e.g. wind loads or vibrations) as well as extreme climatic fluctuations (e.g. with regard to temperature and humidity) should be avoided. In this context, the fact that the temperature of the substrate may be materially lower than that of the air should be taken into account. Depending on the season, moreover, daytime and night-time temperatures may differ considerably. In particular, these factors may greatly influence the setting behaviour of viscous or liquid products from the DELTA® range of adhesives.

Products from the DELTA® range of adhesives should always be protected from UV radiation (e.g. by covers).



UV protection cover

Always take care to ensure that substrates cannot be moistened by precipitation, dew, etc., and that water cannot collect in the vicinity of seams made with products from the DELTA® range of adhesives.



Substrate moisture

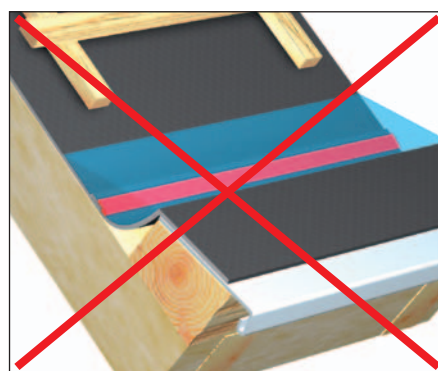
Adhesive seams must always be made free from stress. Moreover, care must be taken to ensure that no harmful stress may occur later on (caused e.g. by the weight of the heat insulation, by an increase in heat-insulation thickness, or by movements of different construction elements). This may be achieved, for example, by allowing for additional material (loop) when connecting sheets to other construction elements.



Loop

Safety advice

Seams cannot replace any mechanical safeguards against wind suction that may be necessary. Nor may they serve as protection against stagnant water. When running against a current of water or on fibrous, rough, or porous substrates, they need to be made with extreme attention.



Water accumulation



	Draught and vapour barriers			Conventional sheets		Separation layers	
	DELTA®-REFLEX PLUS/ DELTA®-REFLEX DELTA®-DAWI GP	DELTA®-LUXX	DELTA®-NOVAFLEXX DELTA®-S _d -FLEXX	DELTA®-FOL SPF	DELTA®-FOL PVG PLUS/ DELTA®-FOL PVG	DELTA®-TRELA PLUS/ DELTA®-TRELA	DELTA®-TERRAXX
Substrate	DELTA® adhesive						
Overlaps	Self-sealing edge DELTA®-MULTI-BAND	DELTA®-MULTI-BAND	DELTA®-MULTI-BAND	DELTA®-MULTI-BAND	Self-sealing edge DELTA®-MULTI-BAND DELTA®-THAN DELTA®-PREN	Self-sealing edge DELTA®-THAN DELTA®-PREN	Self-sealing edge
Smooth wood, wood-based materials	DELTA®-MULTI-BAND DELTA®-THAN	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND	DELTA®-MULTI-BAND DELTA®-THAN	DELTA®-THAN	–
Rough-sawn wood	DELTA®-TIXX	DELTA®-TIXX	DELTA®-MULTI-BAND DELTA®-TIXX	–	DELTA®-THAN	DELTA®-THAN	–
Metal	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND	DELTA®-MULTI-BAND DELTA®-THAN	DELTA®-THAN	–
Plastic (rigid)	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND DELTA®-TIXX	DELTA®-MULTI-BAND	DELTA®-MULTI-BAND DELTA®-THAN**	DELTA®-THAN**	–
Plaster, masonry, concrete	DELTA®-TIXX	DELTA®-TIXX	DELTA®-TIXX	DELTA®-THAN	DELTA®-THAN	DELTA®-THAN	–
Details	DELTA®-FLEXX-BAND DELTA®-LIQUIXX	DELTA®-FLEXX-BAND	DELTA®-FLEXX-BAND DELTA®-LIQUIXX	DELTA®-BUTYL-BAND	DELTA®-FLEXX-BAND	DELTA®-THAN	–

Substrates should be adequately clean, dry, and free from dust, grease, frost, and porosity. Unsuitably porous substrates must be pre-treated with, for example, a primer. The storage, application, and setting conditions of each adhesive should be observed.

■ These installation instructions are intended to assist in planning and execution without claiming freedom from omissions. The statements made herein partially reflect the state of the art. If more stringent requirements regarding execution should result from generally recognised codes of

practice or contractual specifications, these shall have precedence. The statements made herein cannot replace object-specific assessments and constitute no relief of the obligation to act responsibly.

■ Examples of how to execute draught barriers may be found in DIN 4108-7. Further information about assessing and implementing additional measures may be found in the code of the German roofing trade.



This brochure contains important information about the **DELTA® range of adhesive products**. You may either request this information by fax, or simply access our internet homepage: www.doerken.com.



The DELTA® roof programme

Dörken makes your life easier. Systematically.

■ Insulation underlays, waterproofing sheets, sarking sheets, and soft sheathing

DELTA®-MAXX COMFORT
 DELTA®-MAXX TITAN thermomembrane
 DELTA®-MAXX PLUS energy-saver membrane
 DELTA®-MAXX
 DELTA®-VENT N PLUS/DELTA®-VENT N
 DELTA®-ALPINA
 DELTA®-FOXX PLUS/DELTA®-FOXX
 DELTA®-VENT S PLUS/DELTA®-VENT S
 DELTA®-FOL SPF
 DELTA®-FOL PVG PLUS/DELTA®-FOL PVG
 DELTA®-VENT X PLUS

■ Draught and vapour barriers

DELTA®-REFLEX PLUS/DELTA®-REFLEX
 DELTA®-LUXX
 DELTA®-DAWI GP
 DELTA®-NOVAFLEXX
 DELTA®-S₄-FLEXX

■ Separation layers

DELTA®-TRELA PLUS/DELTA®-TRELA
 DELTA®-Enka®-VENT
 DELTA®-TERRAXX

■ Facing sheets

DELTA®-FASSADE S PLUS/DELTA®-FASSADE S
 DELTA®-FASSADE PLUS/DELTA®-FASSADE

■ Ridge and arris rolls

DELTA®-VENT ROLL
 DELTA®-ECO ROLL

■ Chimney and wall sealing tapes

DELTA®-TOP FLEXX
 DELTA®-TOP PAD

DELTA® is a registered trademark of Ewald Dörken AG, Herdecke.

DELTA®



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■ **Standard requests for tender as well as detailed installation instructions** for all DELTA®-Products may be obtained at www.doerken.com as pdf files for you to print out and save.