

Hoesch Thermowand, Hoesch Thermowand 1000, Hoesch Thermowand TL

Installation recommendations



A company
of ThyssenKrupp
Steel

ThyssenKrupp Bausysteme



ThyssenKrupp

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Hoesch Thermowand, 1000, TL

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You have decided in favour of a product from our Hoesch Thermowand range, i.e. for a high-quality industrially fabricated product. Thank you very much! In order to ensure that after completion of the production process, the product will be treated with the same care as in our company, we would like to inform you about the following mandatory handling procedures:

1. Regulations / Guidelines

Among other things, the following must be noted:

- General official approval no. Z-10.4-345 for sandwich panels issued by the building inspection authorities
- Technical information Hoesch Thermowand (proposed designs).
- Accident prevention regulations issued by the Employers Liability Insurance Association
- Directive for the installation of profiled steel sheets for roofs, walls and ceilings issued by IFBS (Info 8.01)
- Information for roofing using profiled steel sheets and strips, issued by Zentralverband des Deutschen Dachdecker-Handwerks'
- Information on the structural analysis and on the laying plans relating to the project

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2. Delivery / Unloading

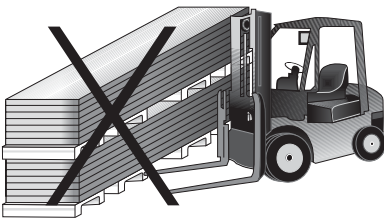
Please check the Hoesch Thermowand packages on their arrival on site. Any complaints and any evidence of damage must be recorded on the shipping documents and reported without delay to the appropriate ThyssenKrupp Bausysteme sales office.

Complaints related to visible damage which are submitted later will not be considered.

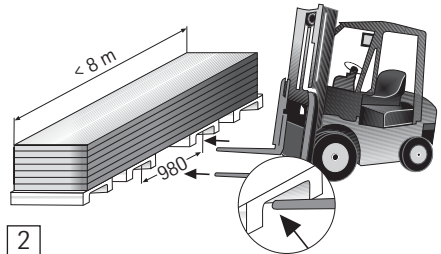
Unloading and transport of the packages must be carried out singly, i.e. one at a time. Never unload two or more packages at the same time (pictures 1 + 3)!

When using a fork lift truck for unloading, the fork lift truck must lift the package below the two centrally arranged styropor joists (centre distance 980 mm) (picture 2). The maximum package length is 8m for this method of unloading; otherwise a fork extension with an additional fork arm must be used. When using a crane for unloading, a spreader bar as well as suitable, sufficiently dimensioned lifting slings (no ropes or chains) should be used. Make sure that the panel edges are well protected (picture 4).

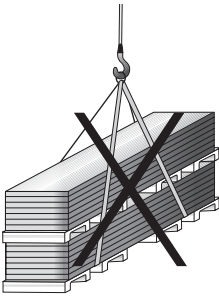
Fasten the slings to the spreader bar so that they hang vertically and can be pulled through below the two unloading aids (dimensions 50 mm x 300 mm x 1060 mm) (picture 5). The unloading aids should be placed with their styropor side facing the Hoesch Thermowand package.



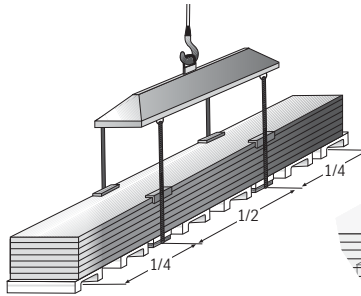
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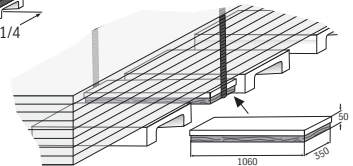
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3



4



5

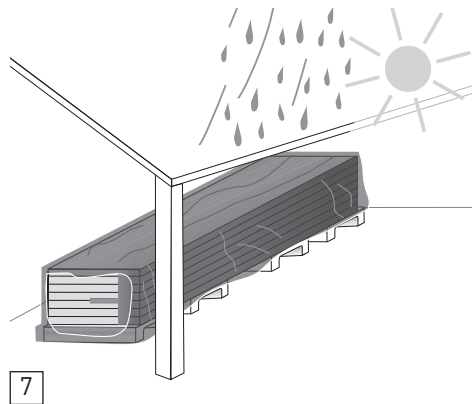
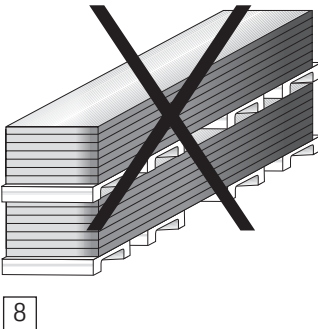
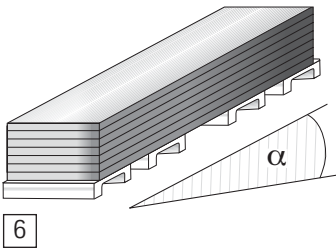
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3. Storage on site

Store the Hoesch Thermowand panels on a firm, dry and clean base. When the panels are stored outdoors, make sure that they are protected against rain, storms and dirt. The formation of condensate must be avoided.

The panels should be stored in a slightly inclined position in order to allow any water that may have entered the package to drain out (picture 6).

When Hoesch Thermowand packages are stored for an extended period of time on site they should be protected by a textile cover and/or stored in a place where they are protected against direct weathering (e.g. under canopies or inside dry buildings) (picture 7). Do not pile the packages one on top of the other (picture 8). Do not store packages on panels which have been installed already (e.g. on the roof). Secure any packages which have been opened.



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4. Preparation of installation work

Before commencing installation work, the supporting structure must be checked that it is suitable for the installation. Hoesch Thermowand panels can be installed on supporting structures made from steel, concrete or wood. These must be checked for suitability before commencing installation work. They must be vertically aligned, rectangular and level.

According to the official approval of Hoesch Thermowand, the min. supporting width for the intermediate support must be 60 mm and for the end support 40 mm. The exact values are indicated in the laying plan and/or the structural analysis. Any defects on the supporting structure which do not allow proper installation or hamper it must be reported to the works supervisor, in accordance with VOB.

5. Protective foil (SF)

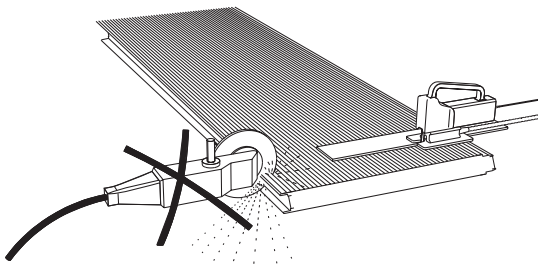
Hoesch Thermowand panels are provided with a strippable foil to protect them from damage during transport and installation.

Please note!

The foil must be protected against UV radiation and must be pulled off during installation work but not later than six weeks after delivery of the panels to the site. In overlapping areas the protective foil must be removed before commencing installation work.

6. Cutting on site

Only use suitable cutting tools, e.g. a compass saw with fine teeth for the sandwich panels, plate shears and nibbler for flashings (picture 8).



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Any chips must be removed immediately.

Thermal cutting processes (e.g. abrasive cutting machines) must not be used. The "Hoesch isotrim" cutting tool has proved to be well suited for

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carrying out cuttings on site. It can be ordered from ThyssenKrupp Bausysteme (part no. Z00-011) (picture 9).



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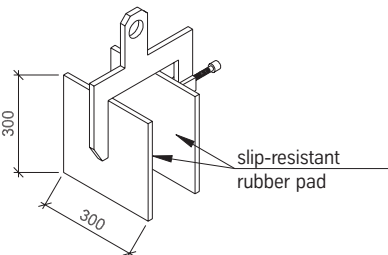
Any cut-outs in panels prepared before the panels are installed must be reinforced appropriately for transport on site.

7. Installation / fastening

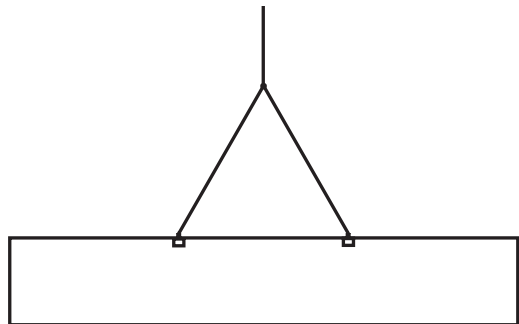
7.1 General / Handling the panels

Short panels may be installed manually but for longer panels it is recommended that suitable aids are used (e.g. vertically holding using a screw clamp (picture 10). For very long elements a spreader bar should be used.

The lifting devices must be secured so that they may not accidentally become undone (e.g. by slip-resistant rubber pads or by an additional sling).



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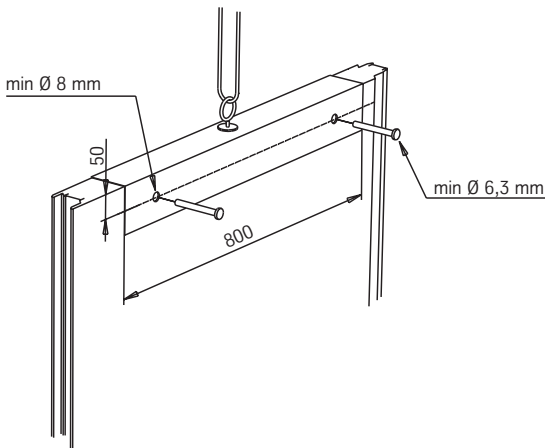
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As an alternative, a transport device as shown may be used.

Bore holes for fastening lifting equipment in the case of **vertical transport** will be covered afterwards by flashings.

By marking the supporting structure at distances corresponding to the modular grid size of the panel (standard spacing 1000 mm) the exact positioning of the elements must be determined in accordance with the laying plan.

In order to prevent the high-quality elements from being damaged, they must be handled with the utmost care. It is recommended that clean gloves are used for handling the elements.

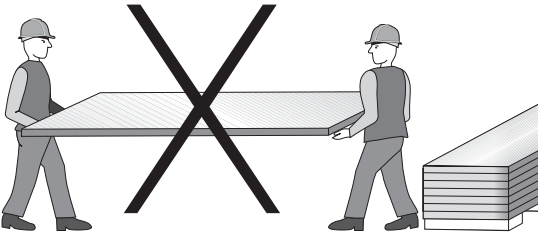


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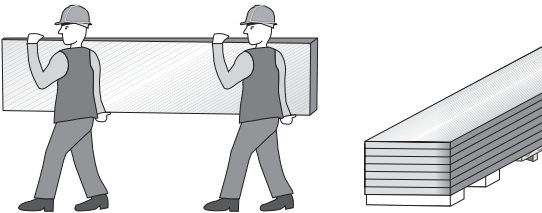
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When removing single panels from a package, make sure that any distortion, bending and localised loads on the panels are avoided!

The panels should be transported vertically (picture 13 A+B)!



13 A



13 B

Protect any panels in packages that have already been opened against stormy weather.

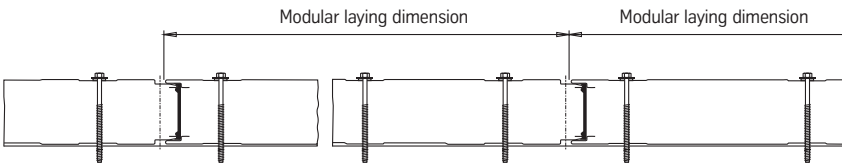
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7.2 Aligning and checking

The first panel must be exactly aligned and fastened.

It is not possible to correct the position of subsequent panels by realigning the longitudinal joint.

The longitudinal joint is sealed by means of the sealing tapes which are factory-applied. Tight sealing is only ensured when the correct cover width is maintained (picture 14). For checking the cover width during installation, control marks spaced between 5 and 10 m should be provided on the supporting structure.



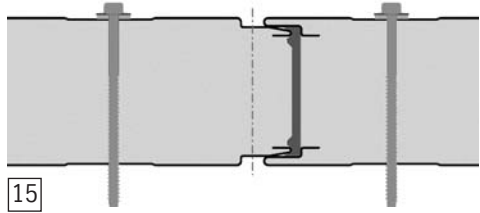
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7.3 Fastening

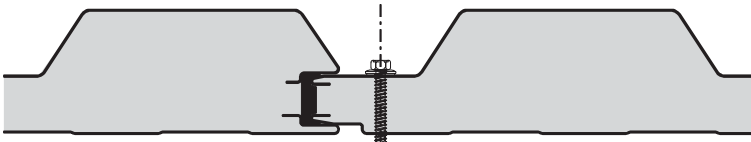
For fastening Hoesch Thermowand panels, only use officially approved stainless steel fasteners.

Depending on the supporting structure (steel, wood, etc.) various thread types may be required (take note of the information of the screw manufacturer).



The officially approved fasteners are screwed into the supporting structure through the surface of the panels. Screws including washers and sealing as specified in the structural analysis must be used.

For the correct number of screws for intermediate and end supports, please see the structural analysis or the applicable load tables. The exact number should be used. Fastening of Hoesch Thermowand TL should always be made in a deep bead (picture 16).



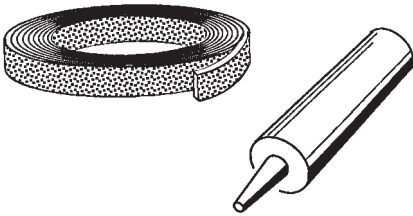
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8. Sealing

Hoesch Thermowand is supplied with a factory-foamed sealing strip in the longitudinal joint which ensures tightness of the panel joint. Sealing of all connection points, e.g. eaves, barge board, foot point etc. must be provided during installation on site. This will be ensured by sealing strips shown on the detailed drawings and/or by additional flashings.

For sealing using cartridges only use amine-hardening silicone rubber-based sealants.



9. Other matters

These installation recommendations are based on many years of experience by us and our customers. They have been prepared to the best of our knowledge. The latest version of our technical documents, and also these recommendations for installation can be found on our website www.tks-bau.com

If the above procedures are not observed, any right to make a complaint in the event of damage will be inadmissible.

Observance of the recommendations does not release the user of our product from his obligations of complying with the local situation and circumstances.

Final remark:

The accident prevention regulations must be observed.

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