

HOESCH ISOROCK®

INSTALLATION RECOMMENDATIONS

INFO 2.4.1

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Hoesch isorock®

Installation recommendations

You have decided in favour of a product from our Hoesch isorock® 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 / Directives

Among other things, the following must be noted:

- General official approval no. Z - 10.4 - 235, Hoesch isorock®
- General official test certificates P – 3545/2430 MPA BS and P – 3544/2420 MPA BS
- This item of technical information Hoesch isorock®
- Accident prevention regulations issued by the employers' liability insurance associations
- Directive for the installation of profiled steel sheets for roof, wall and floor decking issued by IFBS, information no. 8.01
- Information in the structural analysis and in the laying plans relating to the project

Installation recommendations

2. Delivery / Unloading

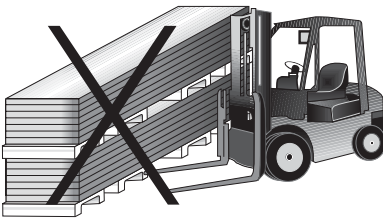
Please check the Hoesch isorock® packages on their arrival on site. Any complaints and any evidence of damage must be recorded on the shipping documents and reported without delay to the appropriate Hoesch Bausysteme sales office.

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 and 3)!

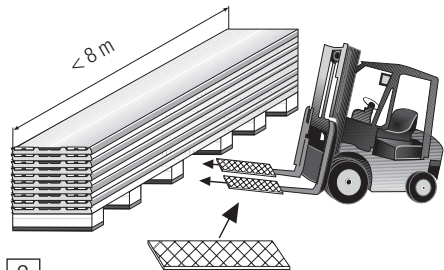
When using a fork lift truck for unloading, the forks must take up the package below the two central styropor pallets (centre distance 980 mm) (picture 2). The maximum package length is 8m for this method of unloading; otherwise a fork extension with an additional fork arm must be used.

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).

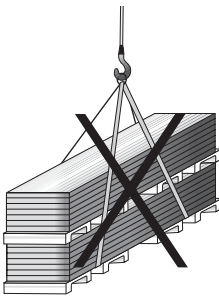
Fasten the slings to the spreader bar so that they hang vertically and can be pulled through the two recommended unloading aids with panel width + 100 mm (please see drawing picture 5). Place the unloading aids between the styropor pallets, the protective surface being on the sides towards the Hoesch isorock® package.



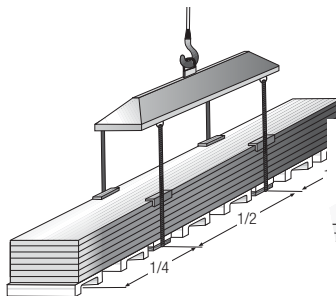
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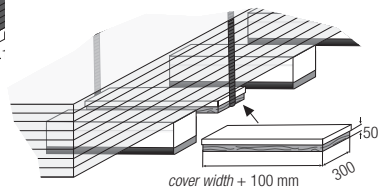
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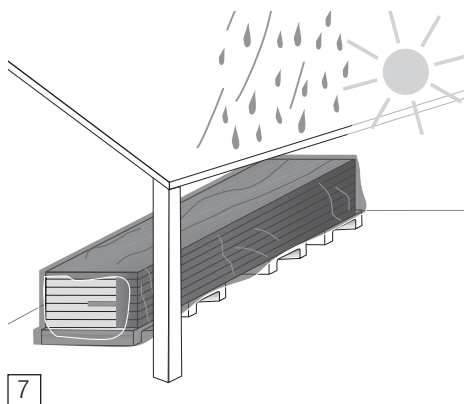
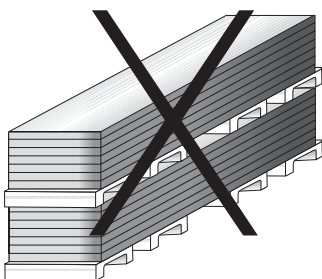
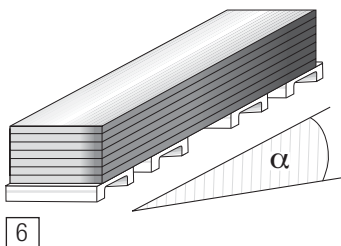
Installation recommendations

3. Storage on the site

Store the Hoesch isorock® 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.

Make sure that the panels are 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 isorock® vario 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 another (picture 8) and do not store them on panels which have been installed already (e.g. on the roof). Secure any packages which have already been opened.



4. Preparation for installation work

Before commencing installation work, the supporting structure must be checked that it is suitable for the installation. Any defects must be reported to the works supervisor, in accordance with VOB. The necessary supporting widths in the structure are quoted in the structural analysis and in the laying plans relating to the project.

recommendations

5. Protective foil (PF)

Structural members provided with protective foil must be installed immediately, taking the following into account: The protective foil must be protected against UV radiation. It must be pulled off during installation work but not later than six weeks after production (picture 9). In overlapping areas the protective foil must be removed before commencing installation work.

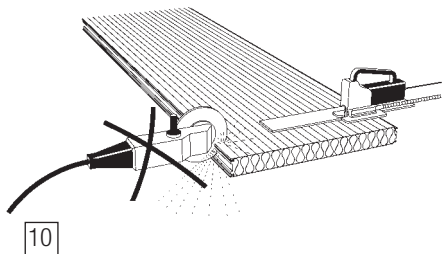
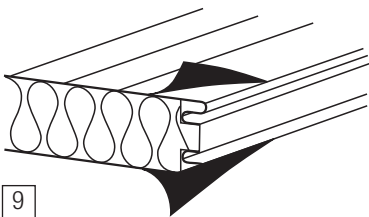
6. Cutting on site

Only use suitable cutting tools, e.g. a compass saw with fine teeth for the panels, plate shears and a nibbler for flashings (picture 10).

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 carrying out cuttings on site. It can be ordered from Hoesch Bausysteme (part no. Z00-011) (picture 11).

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



recommendations

7. Installation

In order to ensure that installation takes place without any problems it is recommended that the following tools are used and the following order of work is observed.

For lifting and positioning the panels, it is recommended that a screw clamp is used (picture 12). Hoesch Bausysteme GmbH will provide these screw clamps against payment of a deposit (part no. Z43-171.0). In the case of horizontal installation, it is recommended that at least two clamps are used (picture 13). For long elements, a spreader bar should be used.

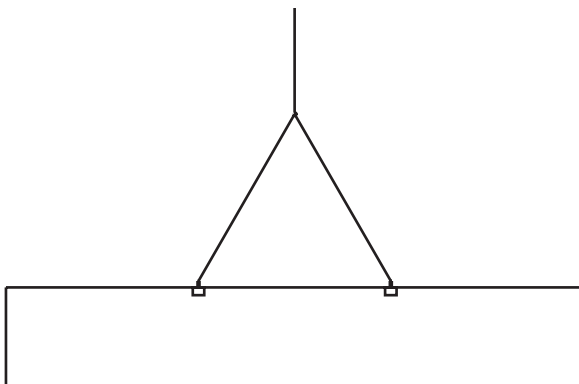
The lifting devices must be secured against accidental undoing (e.g. by slip-resistant rubber pads or by an additional lanyard).

When vacuum cups are used which keep panels in place by suctional force, ensure that such devices are suitable for use with mineral wool sandwich panels. For more information, please contact the manufacturer of these devices. Incorrect use or unsuitable devices may cause damage to the Hoesch isorock element, especially when these devices are used on cover sheets with a flat surface (type E).

When removing single panels from a package, make sure that any deformation, deflection and localised loads on the panels are avoided! The panels should be transported vertically (pictures 14 A+B)!



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Installation recommendations

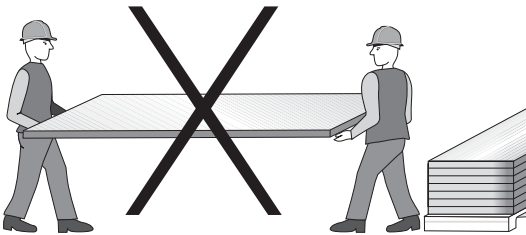
7.1 How to order

Normally, the panels are delivered packaged with their inside (B side) up. Only the lower-most panel is packaged with its outside up (A side). For many years, this procedure has worked well for transport and handling on site.

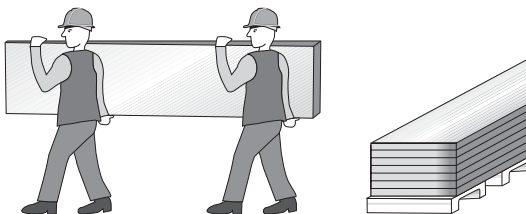
If otherwise required for installation reasons, please state on the order "A side up". This will ensure that the panels are packed accordingly with the exception of the uppermost panel which is packaged with its B side up, in order to protect the topmost A side.

7.2 Special hints for horizontal installation

In order to ensure that the panels are lifted without being damaged, it is recommended that a lifting device is used. We recommend the use of a vacuum lifter from the companies Viavac or Wirth.



14 A



14 B

Installation recommendations

7.3 Aligning / Checking

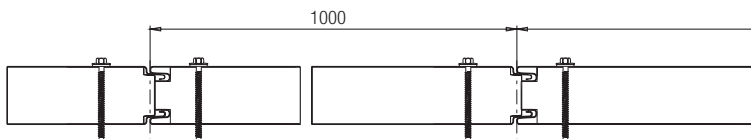
The first panel must be exactly aligned and fastened, independent of the laying direction (vertical, horizontal, diagonal). It is not possible to correct the position of the subsequent panels by realigning the longitudinal joint (picture 15).

The longitudinal joints of the panels are provided with factory-inserted sealing tapes. The sealing tape on the inner side is grey and that on the outer side is black.

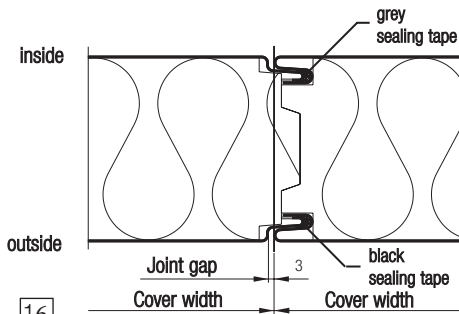
Tight sealing is only ensured when observing the correct cover width (standard: 1000 mm) (picture 16). For checking the cover width, control marks spaced between 5 and 10 m should be provided on the supporting structure. For correct and expert installation, we recommend the use of pressing-on devices provided by Hoesch Bausysteme (part no. Z 43-114) as an installation aid (picture 17). Using these devices, modular dimensions can be easily and exactly adhered to, and the required pressing-on force for achieving tight seals can be precisely adjusted. The number of devices required (at least 2) depends on the length of the panels.

Please note:

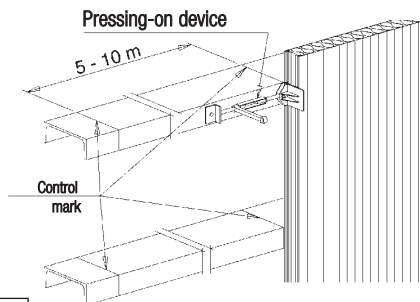
Individuals are allowed to walk on the Hoesch isorock® panels for installation purposes but the panels should not be misused as an installation platform or a base for the storage of materials from any other trade.



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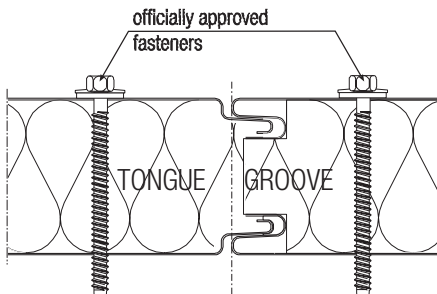
recommendations

8. Fastening

Hoesch isorock® panels are fastened to the supporting structure using officially approved stainless steel fasteners. For the type of bolt, the number of bolts, their size and their spacing, please see the installation plan. The installation plan is based on the project-related structural analysis and the Hoesch isorock® approval Z-10.4-584 the case of panels classified as fire-resistant (DIN 4102-2,3), the installation plan is based on the official test certificates no. P-35454/2430-MPA BS and no. P-3544/2420-MPABS.

Make sure that the cover sheet is not indented by excessive tightening of the bolts. It is recommended that so-called "façade bolts" with supporting thread under the head are used.

When using washers $\varnothing 22$, the risk of indentation is further reduced. It is recommended that electric drills with a bit stop are used. Any drilling chips must be removed immediately.



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9. Design details

Proposed design details for foot points, roof connections etc. may be downloaded from our homepage www.hoesch-bau.com.

Installation recommendations

10. 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 documentation and also these installation recommendations can be found on our homepage www.hoesch-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 products from his obligation of complying with the local situation and circumstances.

Notes



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