

INSTALLATION

MISAPOR[®]

FOAM GLASS BALLAST



FROM START TO FINISH – “EASILY EXPLAINED”

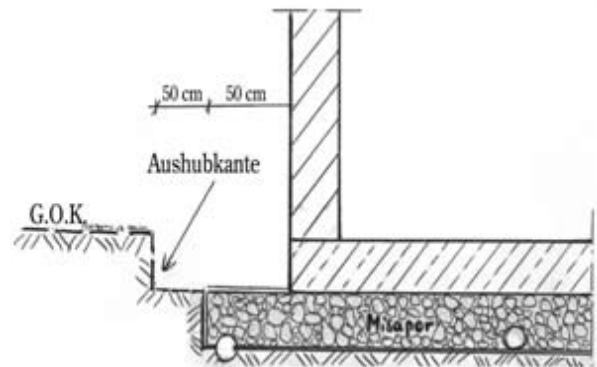
To better understand how simple a MISAPOR installation can be, we offer the following description of a typical installation. Sample on a foundation of a building without basement.

1. EXCAVATION OF BUILDING PIT

Ideally, the excavation is done as follows:

Removal of the top soil up to solid soil. MISAPOR insulation filling should be bordered. The excess length of 50 cm/20 inches offers frost protection. The border can be made from soil, gravel, ballast, or formwork.

(See sketch)



2. POTENTIAL SOIL EXCHANGE

In case the bearing capacity of the foundation is still not sufficient, a soil exchange has to be investigated.

With MISAPOR, costly soil improvement or soil exchange can be avoided. Therefore it is advantageous to evaluate if the build up with MISAPOR is sufficient.



3. INSTALLATION OF PIPES & DRAINAGE

Note: Drainage pipes can be covered with 15 cm MISAPOR and then compressed without additional covering.

Simply install in sand or lean concrete, pipe cover is not needed. Incline drain piping around the border area for proper drainage.



4. LAYING OF GEOTEXTILE (FLEECE)

To avoid sludge accumulation, and to prevent excess moisture or soft behavior (cohesive soil layer) a geotextile separation layer should be installed. Always cover the frost protection with geotextile/fleece (weight ca.0.55-0.7 oz/sq.ft.).

No geotextile is needed for anti-capillary foundation soil. However geotextile is needed at the borders on the frost protection.



5. DELIVERY AT CONSTRUCTION SITE

Load Volume:
90 m³ / 118 cubic yards

Dimension of Truck

Length: 54 ft.

Width: 8 ft.

Height: 13 ft.



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90 m³ / 118 cubic yards

Dimension of Truck

Length: 54 ft.

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Height: 13 ft.



Load Volume:
68 m³ / 89 cubic yards

Dimension of Truck

34 Big-Bag a 2 m³

2.6 Cubic Yard



6. INSTALLATION OF MISAPOR

PLACEMENT BY BIG-BAGS



PLACEMENT VIA CRANE WITH FABRIC HOPPERS



DELIVERY IN LOOSE FORM



Installation and distribution equipment: digger, wheel type loader, tower crane.

Set-up of cross lever laser: adjust to non-compacted installation heights (compression 1.3). MISAPOR must be 30% higher than the final compressed height. Final placement is hand-raked. Multilayer installation needed for installation height larger than 30 cm (12 inches).

7. COMPRESSION OF MISAPOR

Compression of 1:1.3 is achievable with appropriate vibration plate (60 to 120 kg) or rolling machine up to 1.5.

When following this installation instruction, the compression strength defined in the DIBT-Accreditation will be achieved. Load plate pressure tests aren't suitable for MISAPOR and can't be used to compared to mineral ballast or gravel.

A layer compression for installation heights >30 cm must be considered.



SUGGESTED COMPACTERS

(no guarantee)

Vibrationplate-compacter

- Bomag BP 15, 15
- Bomag BP 2048 D
- Wacker WP 15
- Wacker DPS 18504
- Wacker DPS 205, 125 kg
- Weber, Typ VC 22SL, 135 kg

Rolling Machine

- Bomag BW 100
- Bomag BW 120

high frequency plate 15-D2, 90 kg 15-40

8. GEOTEXTILE FLEECE-FOLD AND PE-FOLIE LAYER & CONCRETE BASE PLATE

Work order after compacting:

- Fold geotextile fleece within the forest cover range under the base plate
- Cover with PE-folie (0,2mm), to avoid intrusion of fresh poured concrete
- Install grounding
- Apply distance pieces
- Install armouring
- Pour concrete base plate

