



## HUESKER Geogrids as Base Reinforcement

### 1. General

The following guidelines set out to present as detailed as possible a description of the steps needed to install a base course (roadbase or subbase) reinforced with HUESKER geogrids. It is important to note that this guidance document can only be considered as a generic outline and is not supposed to be, or able to be, a detailed method statement for any specific structure or project.

Please do not hesitate to contact us should any issues arise that are not discussed in these installation guidelines. Our engineers will be glad to answer your queries!

### 2. Transportation, storage and cutting to size of rolls

HUESKER geogrids are packaged in such a way as to provide some protection against normal weathering and transportation damage. However, upon receipt, the goods should be checked for transportation damage and any damaged items put to one side. All movement of the goods within the construction site shall be done in such a way as to prevent any damage to the rolls.

HUESKER geogrids for base reinforcement can be simply cut to size on site. For large-scale applications, it may be appropriate to cut the required sheets in advance at a separate location on site before transporting them to the place of installation. This procedure is particularly efficient and cost-effective on major projects.

HUESKER geogrids have no „memory effect“, i.e. the grids do not roll up after cutting or laying and there is no need to ballast the sides or ends of the sheets.

### 3. Preparation of formation

The first step entails preparation of the formation, including any required excavation. Any major hollows in the formation shall be filled and existing obstacles (e.g. tree stumps) removed.

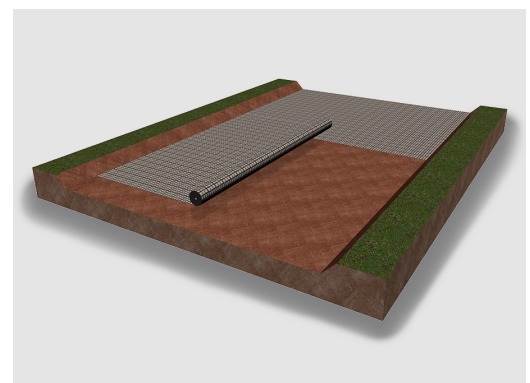
Where the reinforcement is to remain permanently in the construction, the removal of vegetation and stripping of the topsoil is recommended prior to installing the geogrid.



### 4. Installation of geogrid for base reinforcement

HUESKER geogrids can be laid directly on the prepared formation. For larger areas, installation of the geogrid layers perpendicular to the main axis of the works could be considered.

The geogrids shall, as far as possible, lie flat on the base without any folds. Any tensioning of the sheets is not required. No vehicles should operate directly over the geogrid.



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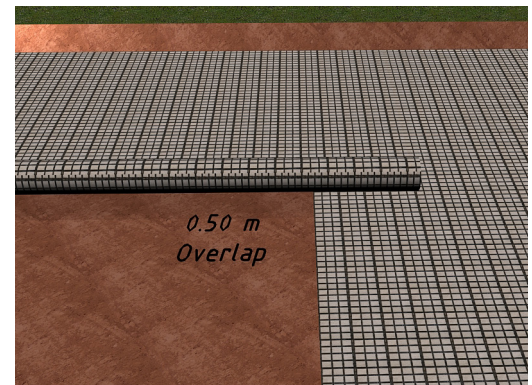
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### 5. Lapping of sheets

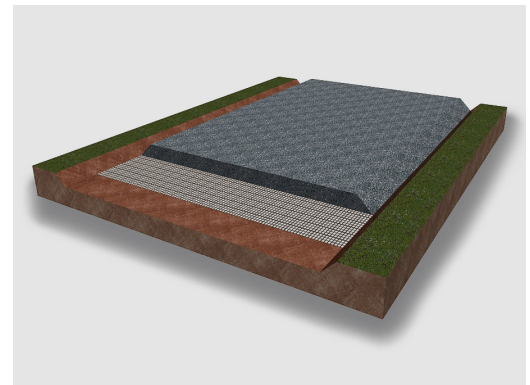
Care shall be taken to ensure that adjoining sheets in both longitudinal and transverse directions are lapped by at least 0.5 m, even after fill placement. Overlaps shall be oriented in the direction of fill placement, to avoid uplift.



### 6. Placement and compaction of base course material

The fill material shall be placed by the „end tipping“ method so as to prevent any damage to the installed geogrid by construction vehicles. Dynamic compaction techniques shall not be employed in the case of very soft ground (typically, watersaturated cohesive soils), particularly for the first layer of base material. The exact thickness of the first fill layer and the compaction method shall be specified with regard to the compacted material and compaction level required for each site.

For subsequent base material layers, it should be determined whether the base is in a condition which would allow dynamic compaction. It is generally advisable that the penetration caused by the vibration energy is less than the existing base course thickness. The installation of reinforced base courses is governed by the latest versions of locally applicable construction regulations.



### 7. Surfacing works

The necessary bearing capacity can be measured on the finished base course (fill material/reinforcing assembly) after a stabilization period of approximately 2 days. After the unbound base course has been fully installed, the remaining operations for completion of the road or surfacing can be performed.

We reserve the right to make amendments and improvements to the products or installation method, without prior notice, in line with technical advances. No liability may be construed and no claims shall be accepted in respect of the information provided in these guidelines.

