

Information on compaction of soil layers above RSS Flüssigboden®

General

Frequently, bulk fillings (sand, gravel, gravel ...) are placed on backfillings of RSS Flüssigboden®. These may need to be compacted using conventional methods. The technical information gives hints for the right time of compaction.

Specific product properties of RSS Flüssigboden®

As RSS Flüssigboden® is supposed to behave like grown soil (solubility, dynamic behaviour, etc.) after its placement, it has a patented functional principle for reconsolidation, which differs fundamentally from the one of concrete or mortar. In order to obtain the soil-specific properties, the process of reconsolidation must be relatively slow. One consequence of this is that RSS Flüssigboden® is temporarily thixotropic during consolidation. This effect is known from ketchup: You tilt the bottle and nothing happens. As soon as you shake it (and add kinetic energy), the fluidity suddenly improves and everything flows at once. For RSS Flüssigboden®, this means that if dynamic compaction energy is introduced too early, the RSS Flüssigboden® will become flowable again and the material on top will mix with the RSS Flüssigboden®. If this happens, it is not necessarily a problem, as the RSS Flüssigboden® will continue to solidify with the appropriate delay and still achieve the usual end properties. Low temperatures or chemical influences may considerably delay reconsolidation. This effect can be counteracted by special (winter) mix designs.

Recommended waiting times depending on the source soil and type of compaction

source soil	placement of gravel	static compaction	dynamic compaction
granular soils	immediately	after about 8h	after about 36 h
mixed soils	immediately	after about 24 h	after about 48 h
cohesive soils	immediately	after about 36 h	after about 72 h

Caution: The values given are average values, which vary according to the boundary conditions.

For deviating technological requirements, please contact us.



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