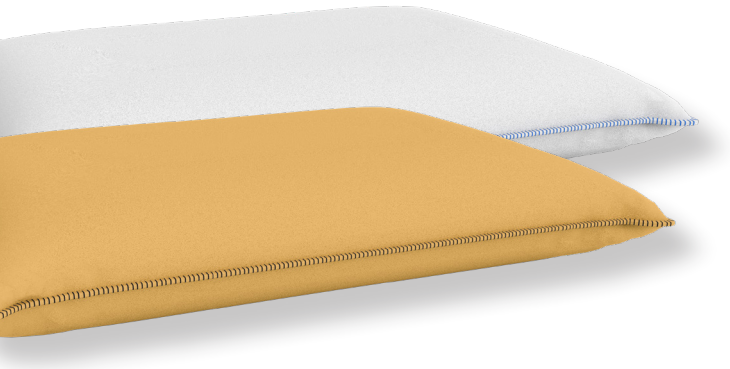

Installation Guideline

NAUE GmbH & Co. KG

Geotextile sand-filled Container (GSC)

Secutex® Soft Rock

Content **Page**

The following installation recommendation contains general installation guidelines.

It is presented as a general format, not as a direct substitute for a project-specific specification. In the event of a conflict, the requirement of the project specification will supersede these recommendations. This recommendation does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this guideline to establish appropriate health and safety practices and determine the applicability of regulatory limitations prior to use.

Further, this installation guideline does not purport to establish specific procedures for all climatic, geographical, hydraulic, or topographical conditions that may exist at a site. Appropriate installation procedures under atypical field conditions should be modified as necessary to maintain the integrity of the Geotextile Sand Container and adjacent components.

The information contained in these installation guidelines corresponds to the latest state of knowledge of NAUE GmbH & Co. KG at the time this document was prepared. We reserve the right to revise it. Please inform yourself about the relevant technical state of knowledge at the time of installation.

It is the responsibility of the customer to check the correctness and completeness of the information contained in these installation guidelines, taking into account all aspects of the application. NAUE GmbH & Co. KG assumes no liability for the incorrect use of the product in an application. Any liability for errors in these installation guidelines is also excluded.

For further information or questions, please contact the planner, designer or NAUE GmbH & Co. KG.

1. Scope

1.1 This installation guideline provides a detailed outline of the procedure to store, fill, transport and install the GSC Secutex® Soft Rock.

1.2 Geotextile containers Secutex® Soft Rock are made of folded needle-punched nonwoven geotextiles and connected with a sewing technique (single seam: overlock stitch or double seam: double chain stitch + overlock stitch) on the two long sides. For filling with sand on the construction-site in dry conditions, one short side is left open. The generally supplied geometry of the product Secutex® Soft Rock is shown in Figure 1.

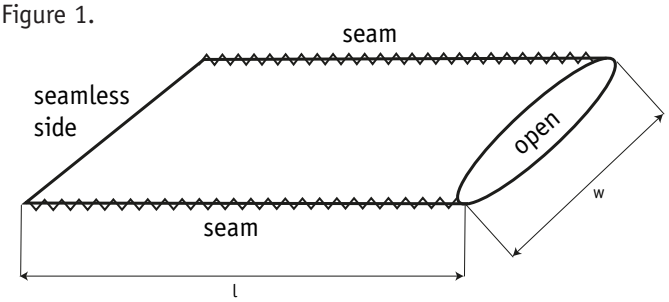

Fig. 1 Empty GSC Secutex® Soft Rock – shape as delivered to site

Note: Open side for fill works. Closure on-site after a sufficient filling volume is reached.

1.3 After filling with sand to a sufficient fill ratio the open side of the geotextile container Secutex® Soft Rock has to be closed completely with a specific sewing technique. Detailed information about the closure on-site is given in section 15.

1.4 The geotextile sand filled containers Secutex® Soft Rock are an alternative solution to conventional revetment systems and provide the function of a filter and ballast in one element. Geotextile sand filled containers are often called “soft rock”.

1.5 Geotextile sand containers are positioned on top of or in front of the soil material which has to be protected against erosion or scour.

1.6 Covered and uncovered solutions with geotextile sand containers Secutex® Soft Rock are possible. During product selection, project site conditions must be considered.

1.7 To provide a sufficient position stability of a geotextile sand container in consideration of e.g. hydraulic influences, a design of the GSC needs to be given before starting the installation works.

1.8 The Secutex® Soft Rock installation guideline is not applicable for geotextile sand containers with a fill volume > 2 m³.

1.9 The Secutex® Soft Rock installation guideline is not applicable for hydraulic filling techniques with pumps.

1.10 This guideline must be present to the installer and the responsible site engineer.

2. Quality statement

2.1 NAUE GmbH & Co. KG as the manufacturer of Secutex® Soft Rock is dedicated to continuous quality. This commitment begins with the manufacturing of the nonwoven geotextile and the ready-made empty geotextile container and continues until the customer has accepted the empty geotextile container Secutex® Soft Rock.

2.2 NAUE GmbH & Co. KG is fully DIN EN 9001:2015 registered.

3. Packaging, transport

3.1 Geotextile containers Secutex® Soft Rock are folded, stacked and tied with plastic straps to a package. Quantity deviations between the different product types are possible.

3.2 The packaging unit for Secutex® Soft Rock geotextile containers has the following dimensions: Length / Width / Height = ~1.20 m / ~ 1.00 m/ ~ 0.65 m. NAUE reserves the right to make alterations. Package sizes of other product types may differ.

3.3 The package weight for Secutex® Soft Rock geotextile containers containers is approximately 150-200 kg. Package weight deviation of other products types must be considered.

3.4 Secutex® Soft Rock packages are wrapped with a protection sheet to avoid negative effects on the package due to shipment, water, sunlight or contaminants while being stored, transported or handled.

3.5 In the unlikely case of damage to the wrapping, the damaged area shall be fixed with tape (Figure 2) or replaced.

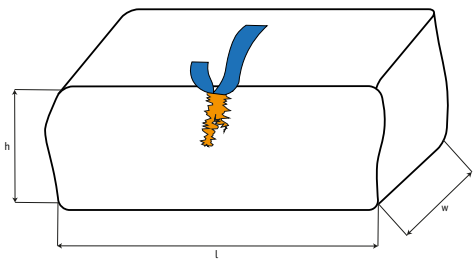

Fig. 2 Fixing of the damaged wrapping with a tape

3.6 For truck loading and transport, the packages can be loaded onto a pallet or single packages can be loaded into a truck or a container.

3.7 Special attention: Be careful when opening the packages. The packages/GSCs are packed and lashed together with the use of plastic straps under tension. When cutting the plastic straps, injuries have to be prevented through suitable health and safety measures.

4. Identification (labeling)

Each package is labelled with the following information:

- Name of the manufacturer
- Unique package number
- Product name and type
- Secutex® Soft Rock container dimensions and approx. fill volume
- Article-Number
- Type of geosynthetic product
- Raw material

5. Roll imprint

Each geotextile container is printed on the outside nonwoven surface with the product name and type name.

6. Plant storage

6.1 Secutex® Soft Rock packages are transported in the manufacturing facility with the use of forklift trucks and are stored in a way no damages affect the performance of the material or the wrapping.

6.2 Secutex® Soft Rock packages are stored covered on elevated, dry and smooth ground, which prevents any damage to the wrapping of the package.

6.3 Secutex® Soft Rock packages are stored stacked with a maximum of eight packages on top of each other.

7. Transport to site

7.1 Secutex® Soft Rock packages are delivered to the site in their original packaging on trucks or in containers.

7.2 Two different types of sewing yarn are necessary for the closure on-site (see section 17). The required amount needed must be ordered prior to shipment (see section 18).

7.3 Before Secutex® Soft Rock packages are unloaded it is recommended to identify and verify the shipment and check whether any packages are damaged. In the unlikely case of damage, details should be noted and reported to the forwarding company and supplier.

8. Unloading procedures

8.1 As with any lifting or loading operations, appropriate safety equipment should be employed and proper safe handling methods should be practiced. This includes an appropriate and firm subbase for the vehicle and the Secutex® Soft Rock storage. The party responsible for unloading the geotextile containers

Secutex® Soft Rock should contact the manufacturer prior to shipment to determine the correct unloading methods and equipment if different from the pre-approved and specified methods.

8.2 Lifting and unloading the packages can be done with a forklift truck. The site conditions should allow fork-lift transportation.

8.3 The Construction Quality Assurance (CQA) inspector should verify that proper handling equipment exists which does not pose any danger to the installation crew or risk of damage to the geotextile containers.

8.4 In the unlikely case of a damage to the wrapping, the damaged area is either fixed with tape (see Figure 2) or is fully replaced.

9. On-site storage

9.1 Secutex® Soft Rock packages should be stored on elevated ground, which will prevent any damage to the wrapping or the geotextile containers.

9.2 In any case the ground shall be dry. The geotextile containers should not be subject to:

- Precipitation (saturated geotextiles are heavy and difficult to handle)
- Ultraviolet radiation
- Undesirable chemicals for any extended period of time
- Flames, including welding sparks, temperature in excess of 70°C and below 0°C (if saturated with moisture, due to possible stiffening when frozen) or below -25°C (if dry)
- Any other condition that may impair the property values of the geotextile container

9.3 Secutex® Soft Rock packages can be stacked up to three packages if stored on-site. It must be ensured that packages cannot fall down at any time once stacked and stored. If packages need to be stored higher, please contact NAUE or their representative.

10. Equipment on-site

- Approved vehicles, e.g. excavators for filling and placing sand containers (e.g. 20t excavator)
- A forklift is required for unloading at the construction-site
- Filling frame e.g. with a filling funnel (see exemplarily Figure 3)

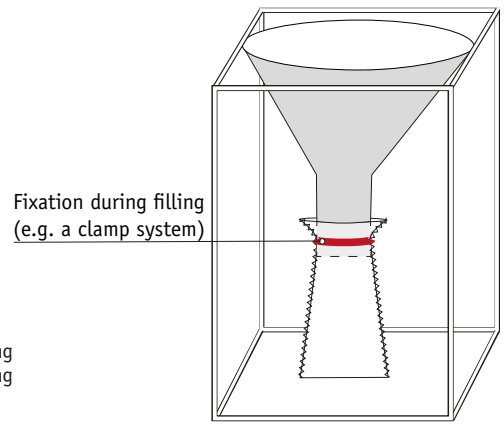

Fig. 3 Standing filling frame with a filling funnel

- Excavator grab with rounded edges (see Figure 4), bucket with a sufficient size or J-Bin.

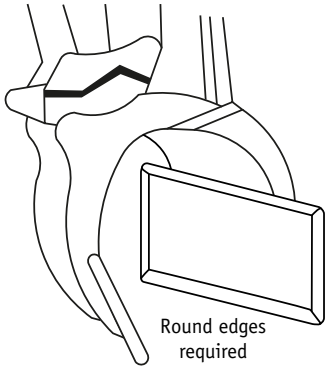

Fig. 4 Excavator grabs for transport and installation of GSCs Secutex® Soft Rock

The grab should not have any sharp edges or corners or any protruding parts that could damage a GSC.

- Excavator operators with personal protection
- 3 Labourers with personal protection, see section 11
- 2 Sewing machines (e.g. Union Special 2200), see section 16

  ▶ Sewing machine: For closing on-site the use of sewing machines by Union Special is recommended. The 2200 series is the only 2-thread portable with upper/lower feed and adjustable stitch length to meet technical specs and seam strengths (hand-held machine).

  ▶ If 2-needle machines are needed, the 80200 series Z2715A can be rigged up to stitch in the field as well. This machine cannot be held in hand, but two parallel chain stitches are possible within one operation.

  This heavy-duty machine is more resistant to sewing difficulties like strong wind or sand drift.

- Sewing yarn (see sections 17 and 18)
- Generator and fuel for the generator
- Utility knife
- Folding rule
- Scale for control of the minimum weight of a GSC

11. Qualification for installer

11.1 The installation crew must have knowledge of the Secutex® Soft Rock installation guidelines and be trained on the filling, closure on-site, sewing technique and installation procedure for geotextile containers Secutex® Soft Rock.

11.2 It is recommended to document the date of training in the construction journal.

11.3 NAUE or their local representative can train installers, if requested. Details are to be determined prior to the training.

12. Fill material requirements

12.1 Sand is recommended to be used as fill material for the Secutex® Soft Rock containers.

12.2 A recommended grain size distribution for the fill material of the geotextile container Secutex® Soft Rock is shown in Figure 5.

12.3 The amount of fine grains is limited to:
grain diameter: 0.06 mm < 5% and
grain diameter: 0.10 mm ≥ 10%

12.4 The largest grain size is defined as d_{max} < 10 mm < 3%.

12.5 Crushed fill material with sharp edges is not allowed to be used.

12.6 For the sand fill material a density γ of ≥ 18 kN/m³ is recommended.

12.7. For the sand fill material a water permeability (k-value) of ≥ 1 · 10^{-4} m/s is recommended.

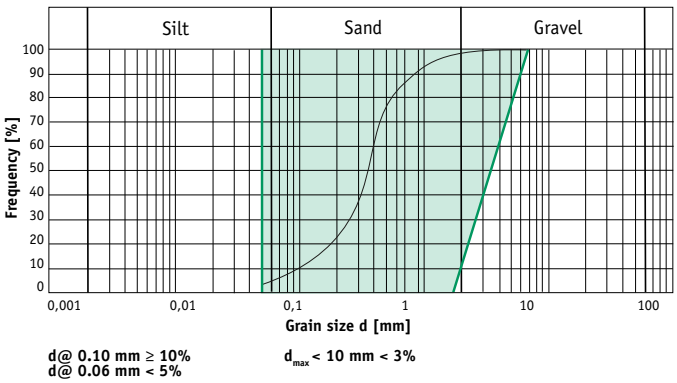

Fig. 5 Recommended grain size distribution for the sand fill material for GSC Secutex® Soft Rock

13. Filling method and techniques

13.1 Secutex® Soft Rock can be filled via the open/seamless side of the container (see Figure 1).

13.2 For filling the geotextile container with sand material, a special device including a filling funnel connected with a stable metal pipe or round frame is required. A stable connection between the metal pipe/frame and the filling device is required for the filling operation. For filling, a connection of the open geotextile container side to the metal pipe or frame should be possible. A sliding lock at the filling device can control the sand filling. A moveable filling device can increase the daily output.

13.3 To hold the container in position during filling and to achieve a high fill ratio of the GSC, the connection of the geotextile container to the filling device should be in a sufficient height, so that the bottom of the empty geotextile container has no ground contact.

13.4 Before filling, the geotextile container Secutex® Soft Rock shall be opened at the seamless, open side to connect it to a round frame or a metal pipe at the filling device using e.g. a strap. The geotextile can be pulled over the metal pipe/frame and fixed on the outside with a tightly drawn strap.

13.5 The bottom of the sand container must hang approximately 0.20 m above the ground. The empty geotextile container should hang uniformly in the filling frame. Folding of the geotextile container during filling will reduce the fill volume. Therefore any creasing or folding of the geotextile container has to be prevented.

13.6 Fill the geotextile container with sand step by step to prevent potential foldings in the geotextile.

13.7 When a sufficient fill ratio is reached (see section 14) the strap around the GSC at the filling frame can be loosened carefully. The stability against tilting of the containers has to be given by proper, smooth and horizontal formation. The filling device has to be constructed in a way that personal safety risks e.g. by squeezing due to dropping or tilting sand containers are excluded.

13.8 The GSC can be closed (see section 15) after pushing sand into the corner areas.

13.9 If a mobile filling frame is used, drive it forward and fill the next Secutex® Soft Rock.

14. Fill ratio

14.1 A fill ratio of ≥ 90% of the Secutex® Soft Rock is recommended, which results for the Secutex® Soft Rock R 601 (W/L = 1.45m/2.38m) in a fill volume V of ≥ 1 m³ and a filled geotextile sand container weight of ≥ 1.4 tons (see section 12).

14.2 The geotextile container should be filled with as much sand as possible, but the closure on-site should still be possible.

14.3 After filling, a sufficient geotextile length at the open end of the GSC should be given, to be able to pull both geotextiles together for the closure on-site. Geotextile wrinkles or geotextile overlaps in the seam area are not allowed. For further information see section 15.

15. Closure on-site (field operations)

15.1 A sewing technique is recommended to close the geotextile container Secutex® Soft Rock on the open side after filling with sand. Therefore a sewing machine and two different yarns are required (see section 10).

15.2 The recommended seam type for GSC closure is the double chain stitch type 401 (see Figure 7).

15.3 A sufficient sand fill ratio has to be given before closing the GSC Secutex® Soft Rock on-site with the use of the recommended sewing technique (see section 14).

15.4 For the preparation of the sewing area, the geotextile at the open end of the GSC has to be pulled together, so that the nonwovens are laid homogeneous and parallel one next to the other over the complete GSC width and a height of approx. ≥ 10 cm (see Figure 6).

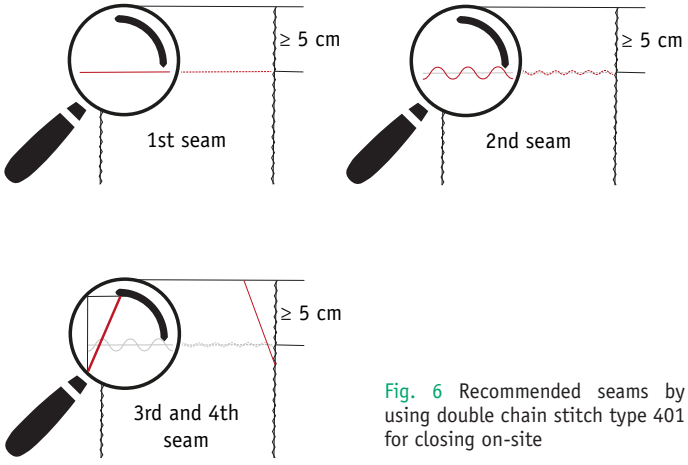

Fig. 6 Recommended seams by using double chain stitch type 401 for closing on-site

15.5 Geotextile wrinkles or geotextile overlaps in the sewing area are not allowed.

15.6 The recommended position of the seams is shown in Figure 6. A complete closure of the geotextile sand filled container Secutex® Soft Rock is requirement.

- 1st seam, straight line: the 1st seam should start at the factory seam edge and should go in a straight line across the top of the GSC to the end of the other factory seam edge.

  No gap between the factory seam (overlock-stitch) and the site seam (1st double chain stitch) should be given.

- 2nd seam, sine wave intersecting 1st seam, the 2nd seam should start and end at the factory seam edges and should go in a sine wave intersection the 1st seam a number of times.

- 3rd and 4th seam, lock off corners and closure of the ends of the 1st and 2nd seam.

15.7 The vertical distance of the 1st and 2nd seam to the upper end of the geotextile should be ≥ 5 cm.

15.8 Finally, the seam quality has to be proven. Seam failures (e.g. imperfections, etc.) in the area of the four defined seams are not allowed. In case of any seam failures additional seams considering the existing defects are recommended.

15.9 A complete closure of the container has to be achieved by the above steps, to prevent the trickling out of sand or, after installation, the washing out of sand through the seam area.

16. Recommendations for the sewing machine operation

16.1 Before using the sewing machine, the manufacturers "Instructions, Engineer's and Illustration Parts Manual" should be studied and followed. The sewing machine operation requires special attention and shall be trained in advance.

16.2 The sewing machine has to be cleaned during the sewing operation. The sewing machine has to be free of sand and/or other materials which can influence the machine operation.

16.3 The nonwoven geotextile in the sewing area has to be free of hard materials (e.g. shells, sand and stones) which can prevent stitching.

16.4 If the sewing machine does not move forward, stop sewing, unplug power supply, clean and control the machine and start over.

16.5 To control the correct operation of the sewing machine, test seams are recommended.

16.6 To control the seam quality, a quality control of seam properties is recommended (e.g. seam strength).

17. Yarn

17.1 Only sewing yarn supplied by NAUE GmbH & Co. KG shall be used for the on-site closure of the GSC Secutex® Soft Rock.

17.2 The two yarns need to be ordered together with the geotextile containers Secutex® Soft Rock.

17.3 To be able to prove the homogeneous seam quality, two different yarns with different colors are recommended. For the Secutex® Soft Rock R product range a white or red PES yarn spool as yarn A and a black PES yarn spool as yarn B (compare Figure 7) is recommended to be used. For the Secutex® Soft Rock RS product range a green PE yarn spool as yarn A and a blue PE yarn spool as yarn B is recommended to be used.

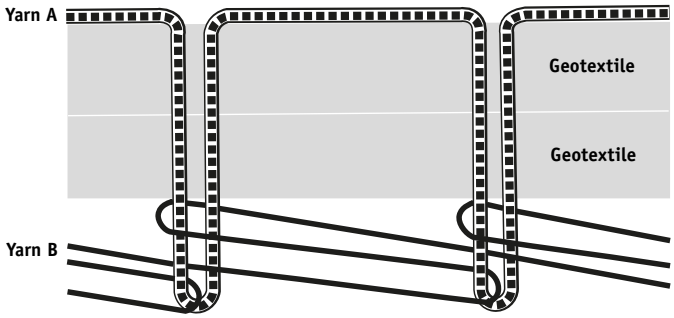

Fig. 7 General cross section of a double chain stitch type 401

17.4 An exemplarily determination of the required yarn quantity for the on-site closure of a GSC Secutex® Soft Rock R 601 is given in section 18 for a single GSC.

17.5 If other yarn is planned to be used, the product-specific yarn properties must be reviewed and approved by NAUE and it must be ensured that the sewing machine will operate properly to achieve a sufficient seam quality.

18. Estimated yarn quantity for the on-site closure

18.1 The yarn quantity for the on-site closure has been exemplarily determined for a type 401 (see Figure 7) and in consideration of the closing technique (see Figure 6).

18.2 The yarn quantity for the on-site closure (here seam 1 – 4) of one geotextile sand container Secutex® Soft Rock R 601 is determined exemplarily in accordance with Figure 6 and Figure 7 and is documented in Table 1 taking an assumed stitch width of 0.5 cm into account.

Seam number	Seam length L [m]	Quantity of Yarn A (PES, color: white or red) [m]	Quantity of Yarn B (PES, color: black) [m]
Seam 1	1.45	≥7.25	≥4.35
Seam 2	1.60 (assumed)	≥8.00	≥4.80
Seam 3	0.15 (assumed)	≥0.75	≥0.45
Seam 4	0.15 (assumed)	≥0.75	≥0.45
Total seam length	3.35		
Total yarn quantity		**≥16.75**	**≥10.05**

Table 1 Estimated yarn quantity for the on-site closure taking an assumed stitch width of 5 mm into account (wastage not considered)

19. Filled shape

19.1 The final sand-filled GSC Secutex® Soft Rock shape can vary and is influenced by the sand fill material, the fill ratio, the fill technique, the transport and installation.

19.2 Filled dimensions as known from bricks (length, width and height) cannot be given for filled GSCs. The filled dimensions are always approximate values and can vary.

19.3 The filled GSC Secutex® Soft Rock shape can be described as a well-filled cushion or pillow with an approximate geometry as exemplarily documented for the product Secutex® Soft Rock in Figure 8. Depending on diverse influences on-site these dimensions can vary and are not the responsibility of the manufacturer.

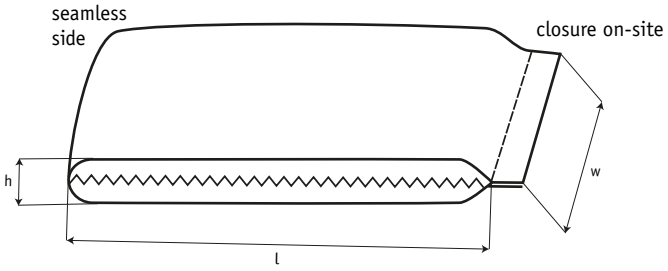

Fig. 8 Approximate geometry of a filled GSC Secutex® Soft Rock

20. Handling and transport of filled GSCs

20.1 Filled GSCs Secutex® Soft Rock can be stored on a leveled soft sand surface. It is not allowed to stack filled GSCs.

20.2 Sand-filled and closed geotextile containers Secutex® Soft Rock can be transported on-site for the final placement. Therefore special grabs or front loaders with round edges are required to prevent any damages of the geotextile sand container. The grab should not have any sharp edges, sharp corners or any protruding parts that can damage a GSC (see section 10).

20.3 When lifting and transporting a GSC with the use of a grab, it should grip the GSC from the long side and hold at least two thirds of the GSC inside the grab. Therewith geotextile elongation can be limited before final placement.

20.4 When lifting and transporting the GSC with a front loader grab, the complete GSC should be inside the front loader grab before lifting.

20.5 If a GSC Secutex® Soft Rock is damaged during filling, handling, transport or installation (holes in the nonwoven geotextile or in the seam area) the damaged GSC has to be replaced with a non-affected GSC Secutex® Soft Rock. The damaged GSC has to be emptied and the nonwoven geotextile container has to be disposed of.

21. Preparation of formation

21.1 The surface upon which the Secutex® Soft Rock is installed should be smooth and free of debris, roots, vegetation resides, and sharp rocks/boulders larger than 50 mm. Site specific compaction requirements should be followed in accordance with the project plans and specifications.

21.2 The subgrade preparation and surface should be inspected to meet the requirements defined before installation. Any change in the condition of the subgrade that could cause it to be out of compliance with any of the requirements of the project specification should be submitted for the engineer's attention.

22. Installation

22.1 Secutex® Soft Rock containers are placed on-site following the project-specific layout plan or operational installation description by using the handling equipment as given in chapter 20.

22.2 Maximum drop height in dry condition ≤ 0.5 m on smooth and sandy formation.

22.3 Maximum drop height in water ≤ 1.5 m on smooth and sandy formation. Greater drop heights can be used if considered in the design.

23. Cover layer placement

23.1 In all cases it is required that the responsible designer/engineer approves the stability of the system.

23.2 Cover soils shall be free of sharp edged stones or other foreign matter that could damage the GSC Secutex® Soft Rock. Cover soils should be an approved material with respect to particle size uniformity, moisture content, and chemical compatibility.

Recommended cover soils typically have a well-graded particle size distribution ranging between fines and 25mm.

Soils with more than 50% of material (by weight) larger than 20mm may require a field-scale test using the proposed subgrade surface, cover soil, and placement equipment.

23.3 Placement of sandy soils over GSC Secutex® Soft Rock shall be preferred.

23.4 Soil cover shall be placed over the GSCs Secutex® Soft Rock to minimise stresses on the GSCs. A homogeneous cover layer for all Secutex® Soft Rock Type R should be given in the final state.

23.5 Driving with a vehicle directly on top of GSCs Secutex® Soft Rock is not allowed.

23.6 If conduction vehicle will drive on top of GSCs: A minimum of 300 mm of cover shall be maintained between the equipment tires/tracks and the GSCs.

23.7 Frequent traffic can be run over a soil coverage of at least 800 mm. Differing thickness or soil material might be possible due to site conditions and soils. In this case, please contact NAUE or their local representative.

23.8 Soil cover should be placed on GSCs Secutex® Soft Rock Type R by carefully placing the soil with an excavator grab, without causing any damage.

23.9 When another GSC or another geosynthetic material is placed over installed GSCs, equipment and construction practices that could damage the GSCs must be avoided.

23.10 The cover soil layer on top of installed GSCs Secutex® Soft Rock should be placed within less than one week.

24. Weather and site conditions during installation

24.1 The installation work can be influenced by climate or hydraulic conditions (tides, wave attack, high water level, strong wind, heavy rainfall). These conditions can influence the filling and installation of GSCs as well as the work surface and storage area. These conditions have to be taken into account, when planning an installation. Health and safety measures have to be considered.

25. Interruptions during installation

25.1 With respect to the project-specific site conditions (e.g. wave attack or high flow velocity), it has to be proven if the installed GSCs Secutex® Soft Rock have to be protected against hydraulic influences before the complete structure has been finalised. These conditions have to be taken into account, when planning the construction and installation.

26. Repairs

26.1 If a GSC Secutex® Soft Rock is damaged during filling, handling, transport or installation with resulting holes in the nonwoven fabric or in the seam area, it has to be removed and replaced with a non-affected GSC Secutex® Soft Rock.

26.2 GSCs Secutex® Soft Rock can be damaged e.g. by vandalism, ship screws or the like.

26.3 Information on repair techniques can be obtained from NAUE.

27. Maintenance

27.1 The responsibility for the maintenance lies with the owner.

27.2 Once the GSC structure is completed, a periodic maintenance by the owner is recommended.

27.3 The homogeneous cover layer (e.g. sand) on top of the GSCs has to be controlled and if required replaced.

27.4 Damages of GSCs have to be identified and need to be repaired, or GSCs have to be replaced.

28. Special Conditions

For other specific procedures contact a NAUE representative.

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Installation Briefing ❑practical ❑theoretical

1. Name of site: _____

2. Date: _____ **Time** from: _____ to: _____

Visual inspection of geosynthetic: _____

4. Contractor: Company: _____

Name: _____

Tel.: _____ Fax.: _____

Email: _____

5. Installer: Company: _____

Name: _____

Tel.: _____ Fax.: _____

Email: _____

6. Weather:

Temperature: _____ ❑sunny ❑cloudy ❑Rain or Snow ❑light ❑medium ❑strong

7. Installation guideline available on construction-site ❑yes ❑no

Status of guideline: _____

8. Subbase condition: _____

9. Fill material/grain size: _____

10. Type of cover soil: _____

10. Photo documentation: ❑yes ❑no GPS position _____

Photo filed: ❑yes ❑no File location _____ Marked in installation plan: ❑yes ❑no

11. Notes on additional pages: ❑yes ❑no _____

12. Confirmation of briefing:

Name: _____ Name: _____

Company: _____ Company: _____

Date, signed: _____ Date, signed: _____

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Secutex® Soft Rock unloading

Type	Status and no. of Installation Guideline

Date	Package No.	Damages	Fixed	Comments	Name symbol
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no		

On-site storage according to chapter 7 of Secutex® Soft Rock Installation Guideline	❑yes ❑no	Comments	Name symbol

Name symbol	Name	Company

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Secutex® Soft Rock installation

Type	Status and no. of Installation Guideline

Date	Package No.	Sand fill ratio checked ≥ 90%	Closure on-site checked	Chapter 1 - 28 followed	Differences/comments	Name symbol
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		
		❑yes ❑no	❑yes ❑no	❑yes ❑no		

Name symbol	Name	Company

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