SWISSCROSS
BAHNÜBERGANG
PASSAGE À NIVEAU
PASSAGGIO A LIVELLO
RAIL LEVEL CROSSING

INSTALLATION INSTRUCTIONS

SWISSCROSS

RUBE

RUBBER-CONCRETE

LEVEL CROSSING

SWISSCROSS

HD

RUBBER

LEVEL CROSSING

SWISSCROSS

GFK

RESIN

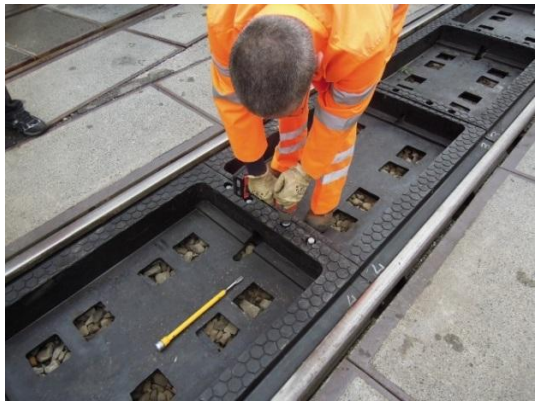
SERVICE/PEDESTRIAN CROSSING

REX.CH
RUBBER AND THERMOPLASTICS

www.rex.ch

«SWISSCROSS RUBE»
RUBBER-CONCRETE
LEVEL CROSSING

INSTALLATION INSTRUCTIONS



Ver. ott14

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

Advantages

- Best vibration damping and noise reduction
- More Load resistance and less deformation to the passage of heavy vehicles
- Quick and rational assembling
- Better resistance and durability
- Best behavior with frosting and rain
- High stability
- Ensure electrical isolation between the two rails

Rubber-concrete level crossing «SWISSCROSS RUBE»

gauge: 1000 – 1435 – 1524 – 1600 mm

INSTALLATION INSTRUCTIONS
Level crossing system with open groove (distance 1000, 1435 et 1524 mm)

Technical advices and sales by Rex Articoli Tecnici SA

REX.CH RUBBER AND THERMOPLASTICS

Installation Instructions
«SWISSCROSS RUBE»

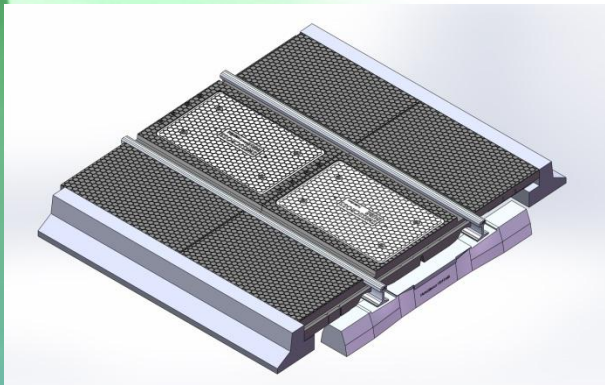
INSTALLATION INSTRUCTION FOR SWISSCROSS PASSAGE AT RUBE

1. USE

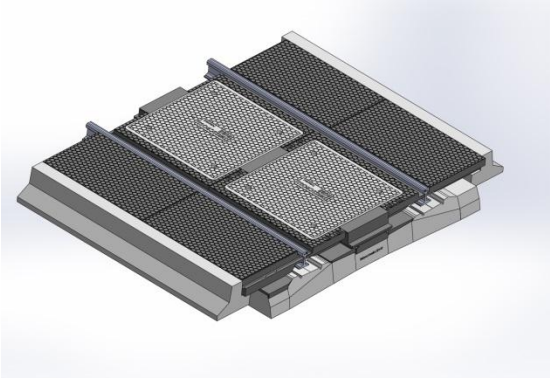
This statement relates to the execution of «SWISSCROSS RUBE» passage level in rubber-concrete.
The «SWISSCROSS RUBE» passage can only be mounted on concrete sleeper with a distance of 600 +/- 10mm between the sleepers. There are different models depending on the type of rail. Before starting the installation check the equipment, particularly the correspondence between the type of sleeper and the path with the elements provided. The checklist compiled under command can help. If the assembly provides the installation of concrete curbs this must be arranged in advance. Installing the asphalt connection to the wheel must be organised to be done just after laying the PN. The « dettaglio bordura » form explains the correct installation of these elements.

Installation Instructions

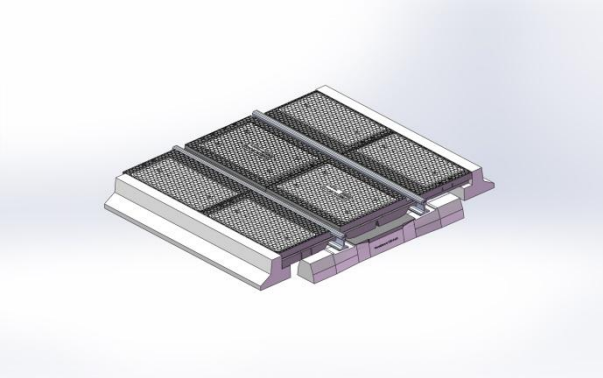
«SWISSCROSS RUBE»



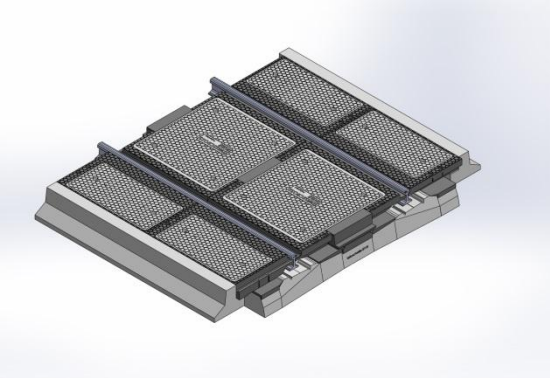
RUBE 1000 with side elements in rubber



RUBE 1435 with side elements in rubber



RUBE 1000 with side elements in rubber/concrete



RUBE 1435 with side elements in rubber/concrete

Installation Instructions
«SWISSCROSS RUBE»

2. NECESSARY EQUIPMENTS AND TOOLS FOR INSTALLATION (see attached list)

- Power driven lifting wagon to lift the concrete elements and press them into rubber elements
- Pegs to lift the rubber and concrete elements, metal bars to bend the rubber elements (Rube 1000)
- Grease
- Agitator to vibrate the ballast, shovel
- Knocker, hammer
- Grease protective bolts
- Cordless screwdriver, impact driver
- 2 24mm polygonal keys, 1 13mm polygonal key. Socket wrench

The installation of a 9 meters PN to 5 persons is calculated at 6 o'clock, with installation of concrete curbs.

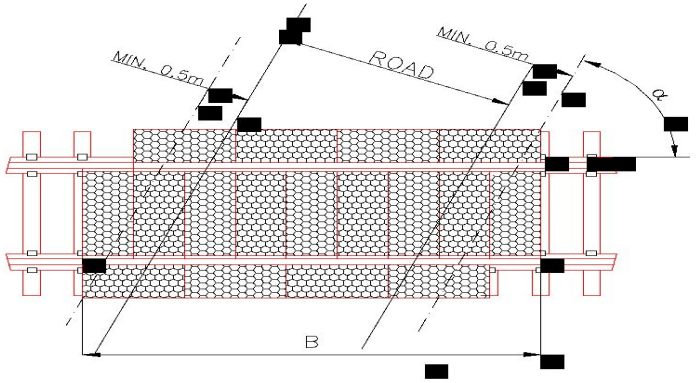
3. INSTALLATION

3.1 Preparation of basement and Installation of supporting elements

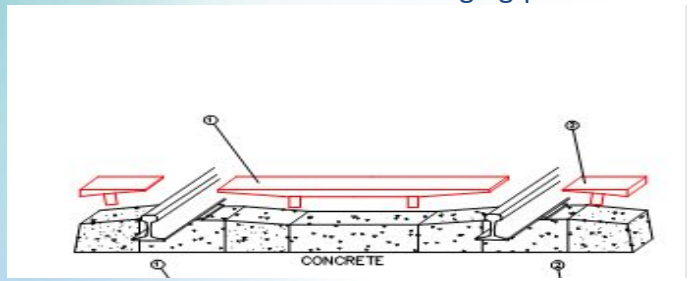
The destination of the level passage should be marked by ensuring the rubber elements are 50 cm wider than the floor
Sometimes the passages are built diagonally. The spacing should be done as follows (recommendation): when the slope of the road exceed 80° there is nothing to respect. With an angle of 70 - 80° it is recommended to cover an additional sleeper and at an angle below 70° it is recommended to cover two more sleepers.

Installation Instructions

«SWISSCROSS RUBE»



In the area of the level passage you need to enclose the old filling outside the rails for 70cm until the end of the sleepers. When it is not possible to stop the flow the installation must be done in two or several sections. In some cases it is necessary to strengthen the sleepers with a vibrator. The distance between the sleepers must be 600 +/- 10mm from the center of the sleeper, and 4 x 600 mm should be 2,400 mm +/- 30mm. When it is necessary to strengthen the sleepers it is recommended to do so before the installation. At the risk of water alluvium under or in the level passage area it is necessary to install a forward flow. The rubber elements would be placed between the rails on the sleepers. The ballast must be carefully filled and and vibrated to the level of the supports surface. It is recommended to control the level with a ranging-pole.



Place the stands as shows in the figure.

Installation Instructions
«SWISSCROSS RUBE»

3.2 Mounting rubber elements

First mark the center of the passage on the rails. The installation begins on the sleeper nearest to the center.
We begin the installation by starting from the center of the level passage with a « female » element. It is necessary to lay the first element carefully in the center of the two sleepers and that it is pressed on the rails. Ensuring a 90° angle of the elements towards the rails. Afterwards, place the second female element at a distance of 1200mm from the first, control the 90° angle and finally place a male element between the elements. Adjust the distance with the hammer. The other elements will be placed in the same way to both ends of the level passage. Finally the items will be screwed together with lightly greased bolts and the mouths closed with rubber caps. (When the level passage is in a curve it is necessary to mount the items marked with a white dot as well as the marks on the outside of the curvature, as given in the assembly drawing).
For an easier assembly you can lightly grease the grooves in the elements and the sides of the rails before installation. All soluble grease in water are suitable for use (soap or grease for mounting the tyres).
The RUBE 1000 is composed of a single rubber element which has to be folded by using metal bars to enter the channel. RUBE 1435 comprises of two rubber elements fixed with pressure with a rigid rubber element (spacer).

RUBE 1000

RUBE 1435

Installation Instructions

«SWISSCROSS RUBE»
«SWISSCROSS H.D.»

3.3 Installation of concrete elements

Grease the walls of the rubber element and the walls of the concrete element. Connect the concrete to the crane with lifting peaks. Lower the concrete element horizontally in the rubber element. Tighten the 4 fixing screws and put the caps. Remove the peaks and put the stainless steel screws to close the holes of the hooks.

RUBE 1000

RUBE 1435

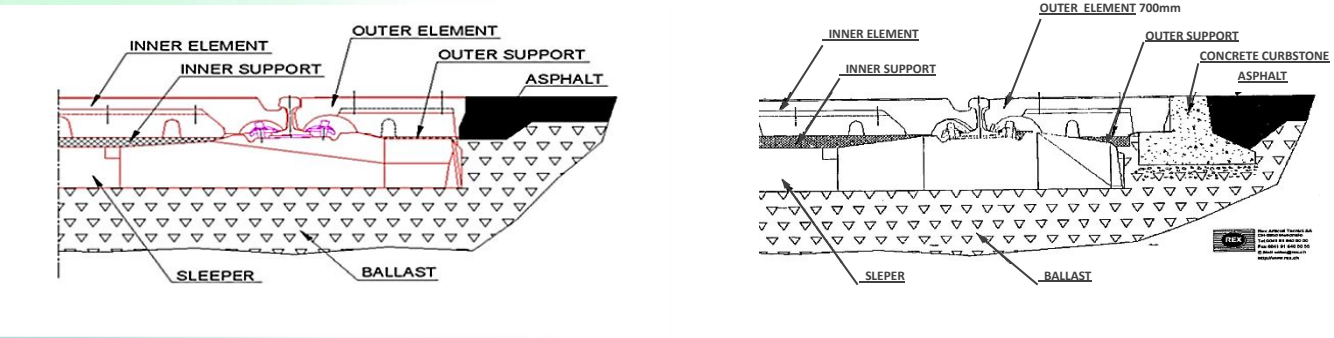
At both ends of the passage apply the galvanised steel protections and the side mounts if necessary.

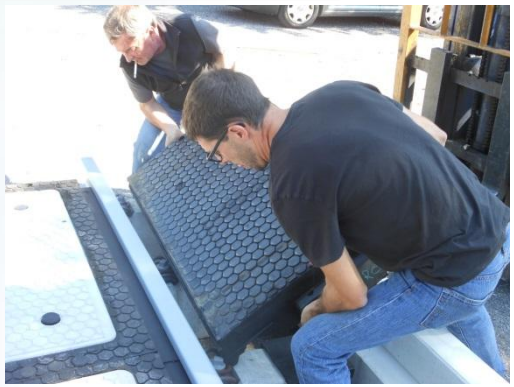
Installation Instructions

«SWISSCROSS RUBE»
«SWISSCROSS H.D.»

3.3 Installation of side elements

The installation of the side elements follows the same system as the internal elements.
Place the angular profile against the side members. Add asphalt in two layers upto the height of the side elements. Start with a layer of 100 mm on the ballast, then fill it up. Another layer of asphalt is added a little higher (+10mm) than the side elements. We recommend the installation of concrete curbs as a transition between the rubber elements and the road surfaces. The card « dettaglio bordura » explains the proper installation of 2 different types of border.





Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

RUBE 1000 Assembly Details:

1

Cleaning of the track and laying of supports

2

Installation of rubber elements

3

Fixing the elements

4

Moving concrete using a power-driven wagon

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

5

Place concrete elements in rubber

6

Place concrete elements to rubber

7

Installing of accessories

8

Installing of side elements

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

RUBE 1435-1524-1600 Assembly Details:

1

Cleaning of the track and installation of supports

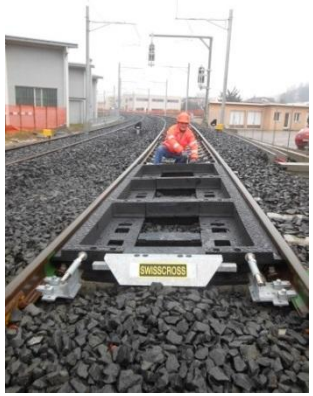
2

Laying of rubber elements (shoe and spacer)

3

Laying of rubber elements
(shoe and spacer)

4



Fixing elements and installing accessories

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

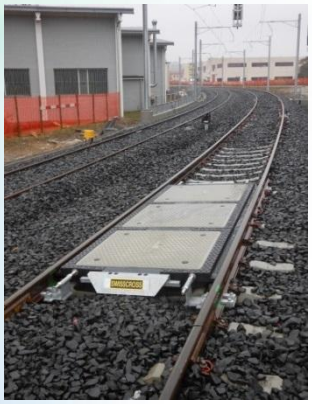
5

Placing concrete elements in rubber

Placing concrete elements in rubber

6

7



Tightening screws

Installing side elements

8

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

RAMS : PL Rube 1000-1435

Description of the system in which the product is inserted:

The new level passage at Swisscross RUBE allows vehicular crossing on railway lines.
It is recommended for PL medium and high road traffic.
The new Swisscross RUBE model combines the advantages of the level passage in concrete with the advantages of the rubber passage.

Advantages:

- Better vibration and noise absorptions.
- Worn major and decrease in deformation during the passage of heavy vehicles.
- Fast and efficient assembly, disassembly for «jamming».
- Longer life.
- Better reaction in case of frost and rain.
- Better stability .
- Guaranteed electrical isolation between the two binaries.

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

RAMS : PL Rube 1000-1435

Description of the environnement in which the product has been introduced:

Resistant to the weather present in the railway environment.

Resistant to stresses caused by passing vehicles.

Does not disrupt railroad traffic.

Only suitable for tracks with monobloc concrete sleepers. Prescribed distance between the sleepers: 60cm.

Class traffic: up to 700 PL/j/s (with concrete curb).

Rubber-concrete level crossing «SWISSCROSS RUBE»

gauge: 1000 – 1435 – 1524 – 1600 mm

RAMS : PL Rube 1000-1435

Reliability :

The Swisscross Rube level passage is guaranteed for 5 years, provided their preventive maintenance is done regularly and the wear parts are replaced. The guarantee is no longer valid in cases of modifications brought about by the client without Swisscross's consent. The warranty is valid from the date of signing the correct installation certificate.

It is advisable to combine preventive maintenance with the « filling » of the railway track.

- PL on a regular traffic (<700 PL/j/s): inspection every 2 years
- PL with intense traffic (700-1200 PL/j/s): annual inspection

Control mode: Remove the most sought after element. Check the condition of the rubber element, the concrete element and the support.

The support is considered as the wearing part. It is guaranteed for 2 years. The rubber and concrete element are guaranteed for 5 years.

The costs generated by preventive maintenance inspections are under the responsibility of the customer.

Expired warranty or not – Swisscross maintenance is not responsible for dammages caused by a system malfunction.

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

RAMS : PL Rube 1000-1435

Security

For the installation of the Swisscross level passage enforce safety provisions of the rail yards.
The responsibility for the security relies on the client's competence.

Rubber-concrete level crossing «SWISSCROSS RUBE»

gauge: 1000 – 1435 – 1524 – 1600 mm

RAMS : PL Rube 1000-1435

Availability

Swisscross ensures the supply of wear parts in Europe within two weeks of the order. For the supply of the concrete element or the rubber element you need to count a delivery time of 4-6 weeks.

PL RUBE is compatible with PL HD Swisscross. The RUBE element can be temporarily replaced by an HD Swisscross rubber element.

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

RAMS : PL Rube 1000-1435

Handling, packaging , transport and storage

Handling of rubber elements must be carried out by four people for the RUBE 1435 element and by two people for the RUBE 1000 element.
The movement of the concrete elements must be performed with a special lifting equipment.
The transportation of the rubber elements does not require a special package. The concrete elements must be properly packed to prevent breakage and slippage.
Swisscross only assumes the responsibility for transportation only upto the warehouse (without unloading). The movements on the site are the customer's responsibility.
Swisscross assumes no responsibility for theft of material at the warehouse or on the site.

Rubber-concrete level crossing
«SWISSCROSS RUBE»
gauge: 1000 – 1435 – 1524 – 1600 mm

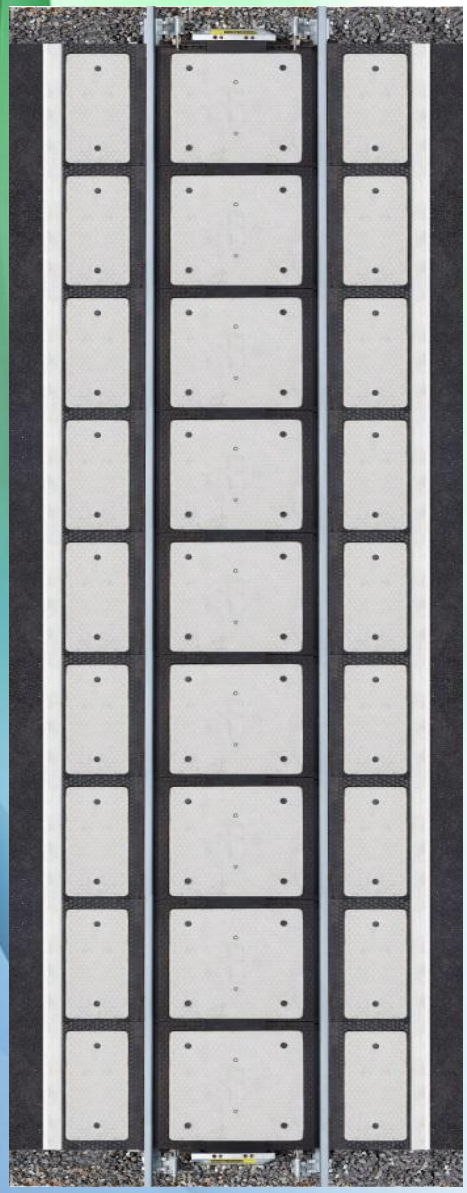
RAMS : PL Rube 1000-1435

Disposal of waste:

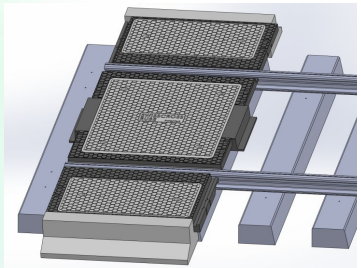
The rubber elements must be disposed of as bulky waste items. Concrete elements must be disposed of as being inert. The material for the fixings must be disposed of as ‘‘old iron’’.

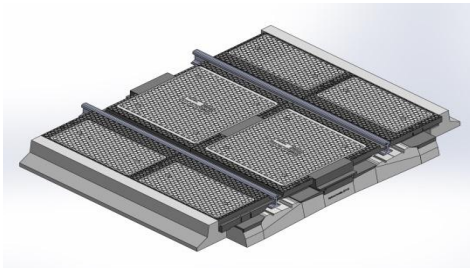
The disposal is the client’s responsibility.

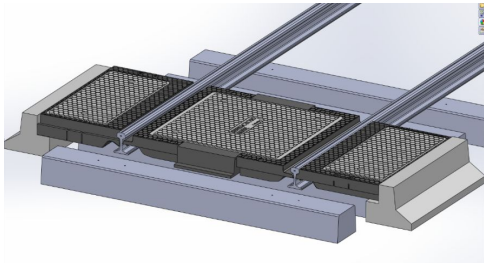
«SWISSCROSS RUBE WITH SIDE ELEMENT IN RUBBER-CONCRETE»
PROTOTYPE 2014



The new model Swisscross RUBE combines the advantages of the concrete crossing with the advantages of the rubber crossing, now with a better load resistance!







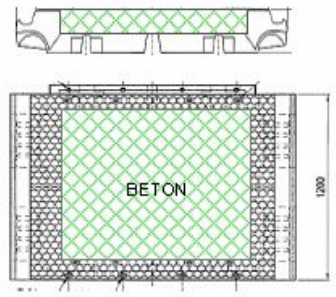
- **ADVANTAGES:**
- Best vibration damping and noise reduction
- More Load resistance and less deformation
- Quick and rational assembling
- Better resistance and durability
- Best behavior with frosting and rain
- High stability
- Ensure electrical isolation between the two rails

REX.CH RUBBER AND THERMOPLASTICS

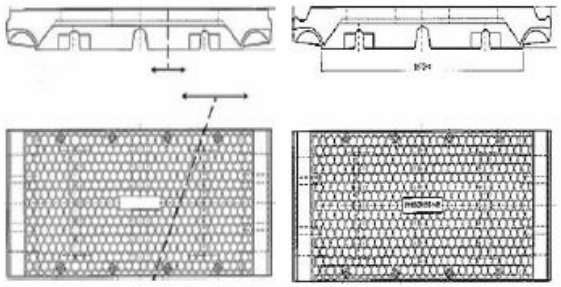
«SWISSCROSS RUBE»

Tipologies

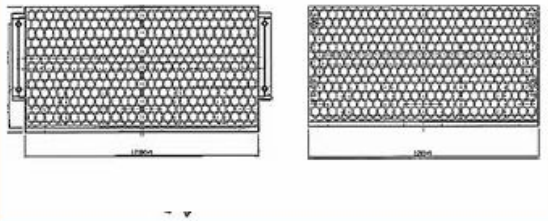
INTERBINARIO Maschile / Femminile
Dim. 1200x1000/1435/1524/1600mm



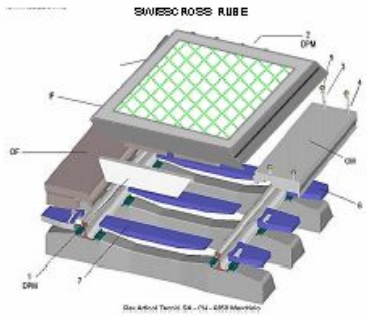
INTERVIA Maschile / Femminile
NORMMASS 600x1781mm/ZUGESCHNITTEN



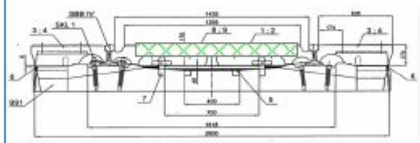
ELEMENTO ESTERNO Maschile / Femminile
Dim. 352/535/700x1200mm



SWISSCROSS RUBE
ÉLÉMENTI

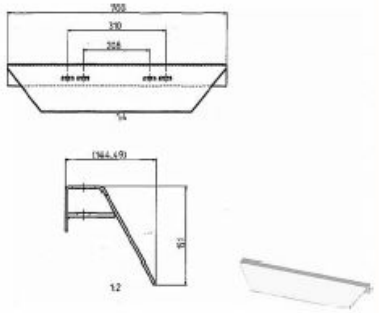


SWISSCROSS RUBE
SEZIONE TRAVERSA IN BETON



SWISSCROSS RUBE
ANCORAGGIO

SWISSCROSS RUBE
PLACCA DI PROTEZIONE



«SWISSCROSS RUBE»

Check List

REX SA RUBBER AND THERMOPLASTICS — IRIS Certification

Commitente: .....

Responsabile: .....

Oggetto: .....

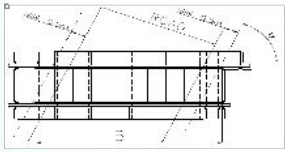
Opera: .....

Imprenditore: Rex Articoli Tecnici SA - Via Catenazzi 1 - CH-6850 Mendrisio

Responsabile:

Passaggio a raso tipo: Traffico pesante ☐ Traffico leggero ☐ Pedonale ☐ Altri: .....

1 Scartamento: ☐ 1000 mm ☐ 1435 mm ☐ 1524 mm ☐ 1600 mm



2 Larghezza del passaggio B: m .....

3 Angolazione della strada: Gradi: .....

4 Numero binari: pz. .....

5 Elementi interbinari: pz. ..... 1200mm ☐

6 Elementi intervia: pz. ..... 600x1781mm ☐ Su misura ☐

7 Elementi esterni: pz. ..... 535mm ☐ 700mm ☐

8 Placca di protezione necessaria: pz. ..... Si ☐ No ☐

9 Tipo di traversa **Beton** ☐ Fabbricante: .....

10 Tipo di traversa **Acciaio** ☐ Fabbricante: .....

11 La distanza tra le traversine deve essere: **600 +/-10mm** Rilevato mm: .....

12 Tipo di rotaia: **SBB I / 46E1** ☐ **SBB III / 54E1** ☐ **SBB IV / 54E** ☐ **SBB VI / 60E1** ☐

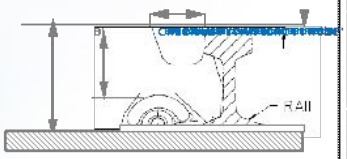
13 Dettaglio supporto: (Fs = Filo superiore)

H = Altezza Fs traversina e Fs testa della rotaia mm .....

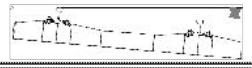
Hi = Altezza Fs attacco e Fs testa rotaia mm .....

D = Altezza Fs rotaia e Fs piastra in gomma mm .....

L = Larghezza della gola mm



14 Sopraelevazione A: mm .....



15 Raggio di curvatura R: m .....

REX SA RUBBER AND THERMOPLASTICS — IRIS Certification

16 Numero passaggi veicoli:

- Autovetture Passaggi al giorno: .....
- Camion - TIR Passaggi al giorno: .....
- Altri Passaggi al giorno: .....

17 Altre caratteristiche: .....

18 Indirizzo di fornitura: .....

19 Termine fornitura: .....

20 Termine montaggio: .....

21 Montaggio/Assistenza Rex Articoli Tecnici SA:

- Montaggio con personale qualificato: Si ☐ No ☐
- Istruzione / Sorveglianza durante il montaggio: Si ☐ No ☐

22 Indirizzo commitente: .....

23 Responsabile: .....

24 Richieste speciali: .....

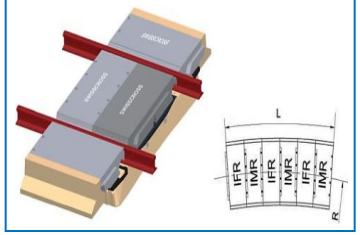
25 Rilievo:

REX .CH RUBBER AND THERMOPLASTICS

RUBBER LEVEL CROSSING
«SWISSCROSS H.D.» (Heavy Duty)

INSTALLATION INSTRUCTIONS

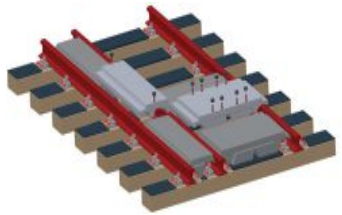
«SWISSCROSS H.D.»
Curve radius



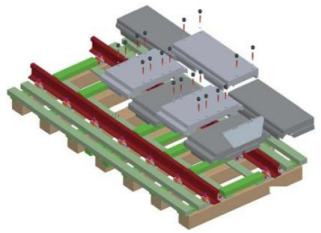
«SWISSCROSS H.D.»
Service

«SWISSCROSS H.D.»
Heavy Duty

«SWISSCROSS H.D»
Double Gauge



«SWISSCROSS H.D»
Pedestrian



Ver. ott14

Rubber Level Crossing
«SWISSCROSS H.D.» (Heavy Duty)
gauge 1000, 1435 and 1524mm

INSTALLATION INSTRUCTIONS

Technical support and sales consultation by Rex Articoli Tecnici SA

Ver. ott14

Installation instructions

«SWISSCROSS H.D.» gauge 1000, 1435 and 1524mm

1. APPLICATION

This assembly guide applies to the **"SWISSCROSS H.D"** rubber railroad crossings.
The SWISSCROSS H.D. railroad crossings can be built into almost any common railways.
For a satisfying development and completion, we recommend completing the "SWISSCROSS Check-List". In case there is ambiguity, Rex will provide a technician for measuring and project drawing for free.

2. NEEDED EQUIPMENT AND TOOLS (Suggested)

- Crane for lifting the parts (for example a mini-digger)
- Assembly hook, eyebolts for lifting the components
- Grease (for example as used in tyre assembling)
- Shaker to make the gravel dense and a shovel
- Sledgehammer, hammer
- Protection grade for the threads (for example machine grease)
- Percussion drill
- Ring wrench 24 mm

3. ASSEMBLY

3.1 Ground preparation

The location of the crossing is marked, in consideration that the rubber parts need to overlap the railway on the sides by 50 cm (adjust to local standards). At the same time, other required measurements should be made. Sometimes, the railroad crossings are arranged diagonally. The clearance must be designed like this (as a guide):
If the crossing angle (see fig. 1) is more than 80°, nothing needs to be considered. At an angle of 70-80°, it would be wise to cover one more, at an angle less than 70°, two more sleepers.

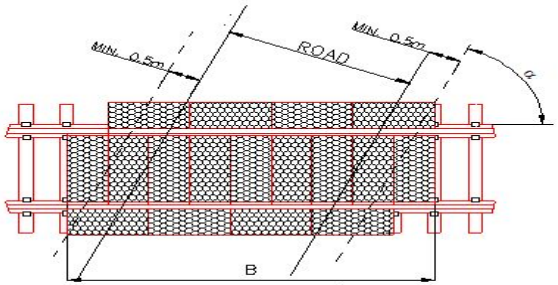


Figure 1

Ver. ott14

Installation instructions

«SWISSCROSS H.D.» gauge 1000, 1435 and 1524mm

Around the crossing, 70 cm of the old surface outside of the rails has to be removed up to the end of the sleepers. If the traffic cannot be stopped completely, the assembly will have to be done in two or more steps. The sleepers might have to be strengthened with a tamping machine. The space between the sleepers should be 600 +/- 10 mm counting from the middle of the sleeper, but 4x600 mm should be 2,400 mm +/- 30 mm. If the sleepers have to be strengthened, it is recommended to do so before the assembly. If there is a danger of water being collected in or under the area of the crossing, an according drain will have to be placed beforehand. The rubber base plates are placed upon the sleepers between the rails, fig. 2.

If wooden sleepers are used, the rubber plates have to be attached to them with screws. Steel nails are used to attach the base plates to the Azobe-sleepers. Iron nails (100 mm) can be used with the plates instead of screws. However, using screws is recommended. When the rubber plates are placed on the sleepers outside of the rails, the plates should be attached in such a way that they close off in a straight line with the edges of the sleepers. Rail gravel has to be raised carefully and tamped, so that it‘s even with the upper edge of the base plates. It is advisable to check the level with a yardstick, so no single gravel stones jut out past the height of the seating. (In that case, the components could not be assembled cleanly between the rails.)

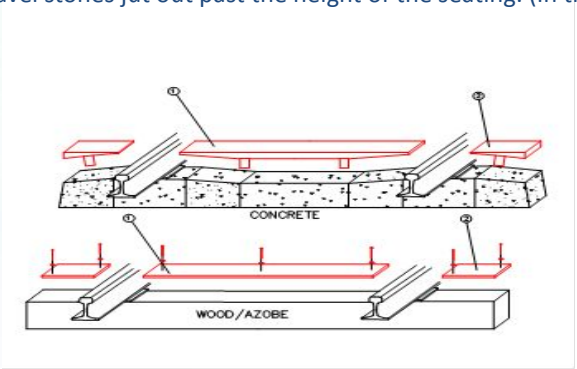


Figure 2

3.2 Assembly of rubber components

First mark the center of the way on the rails. The assembly starts from the nearest sleeper (center). Place the anchor plate (if used) on that center sleeper. Make sure the outer parts are assembled correctly with different lengths of railroad crossings. (For short crossings of for example 4.8 or 6.0m, the anchor plate can be at the end of the crossing, and the assembly can start from there.) Check the assembly blueprint. The assembly starts from the center of the crossing with a “female” component. The inner component is lifted at the center with an assembly hook. Thus, the element will bend slightly in the middle for easier assembly. The first inner component has to be placed very carefully in the center between two sleepers, with its ends adjoining the rails. Make sure the first element is placed at an angle of 90° to the tracks. Then place the second female element at a distance of 600 mm to the first one, check the 90° angle and then place the male element between those two.

«SWISSCROSS H.D.»

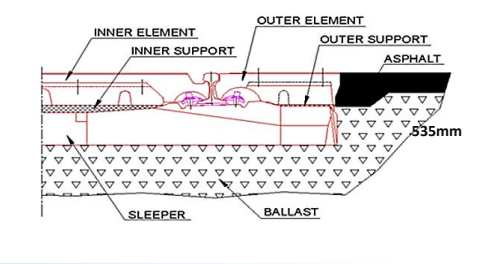
Assembly guide gauge 1000, 1435 und 1524mm

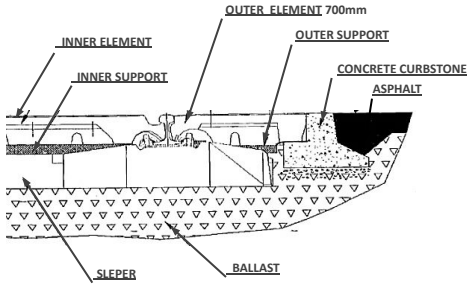
The other elements are assembled accordingly until the end of the crossing. The components are carefully butted against each other with a sledgehammer. Eventually, the parts are assembled with lightly greased screws and the indentations covered with a lid. (If the crossing is at a bend, all the white tagged ends of the “bend-elements” have to be assembled in such a way that the white markings point towards the outside of the bend, as it is sated in the guide.) To ease the assembly, the channelings in the components and the edges on the rail sides can be greased before assembly. Every grease that dissolves well in water is suitable, such as tyre-assembly grease or soap. At the end, assemble the linkage-safety plates at the end of the crossing.

The installing of the Outer Elements starts once again in the centre and works towards the edges. The Outer Elements are lifted with the same assembly hook. The components are connected in the same way as the inner elements. Heed the correct assembly as shown on the drawing. At the end, assemble the safety plates at the edges of the crossing.

3.3 Attachment of the outer parts

Tarmac is applied in 2 layers up to the height of the Outer Elements. First, about 100 mm of tarmac are spread over the gravel, then it is tamped. Another layer of tarmac is applied a little higher (+10 mm) than the Outer Elements on top of that. We suggest the assembly of concrete curb stones as transition from the rubber elements and the pavement. During the maintenance work on the rails, the pavement will not be damaged.





4. MAINTENANCE

4.1 Maintenance in winter

In winter, salt and grit is used to make the streets safe. Salt and grit can applied to the railroad crossings, but it is better to avoid it. Glaze forming on the rubber surface will be removed by the traffic (because of the elasticity of the rubber, the ice will be removed by car wheels). Bonded snow should be removed from the crossings very carefully, so the profiled surface of the rubber parts will not be destroyed. It is recommended to only sweep snow and ice from the railroad crossings.

Installation instructions

«SWISSCROSS H.D.» gauge 1000, 1435 and 1524mm

4.2 Detaching and reassembly of ”SWISSCROSS“ railroad crossings

These additional instructions have to be followed when de- or reassembling railroad crossings: Remove lids covering the screws and unscrew them. With utmost care, it should be possible to lift the Outer Elements without damaging the pavement. It is not necessary to remove the base plates on the sleepers, if any have been applied (concerns wood- and concrete sleepers). If the tarmac is crumbling at the edges, it needs to be replaced after the installation. Before reassembly, sand and waste need to be carefully removed from the ground of the crossing, and at the same time, the condition and fixture of the elements and base plates needs to be checked and, if necessary, fixed. If the height of the gravel is not enough to carry the components anymore, additional gravel will have to be applied and tamped to reach the according height as described in the assembly guide.

Assembly

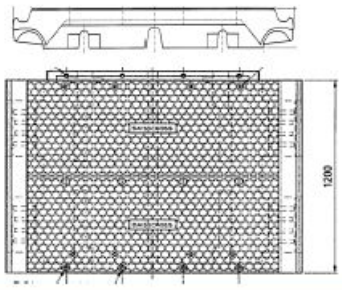
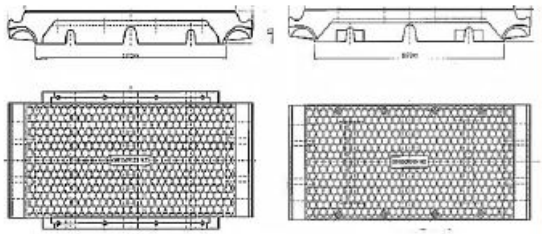
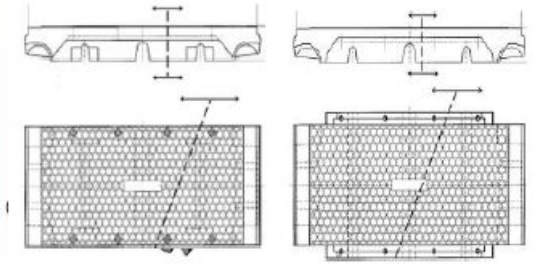
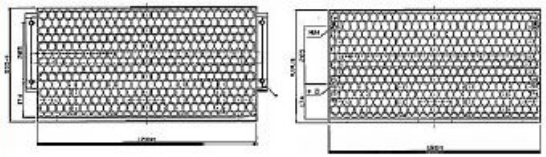
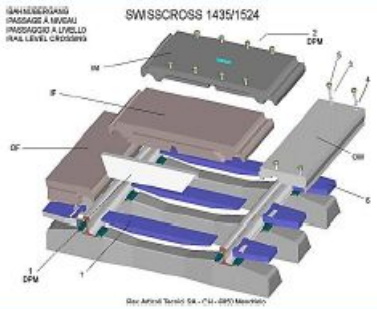
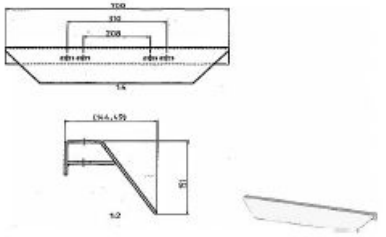







«SWISSCROSS H.D.»

Tipologies

INNERELEMENT «SWISSCROSS H.D.» Männlich / Weiblich Dim. 1200x1000/1435/1524m	INNERELEMENT «SWISSCROSS H.D.» Männlich / Weiblich Dim. 600x1000/1435/1524mm	ZENTERELEMENT «SWISSCROSS H.D.» Männlich / Weiblich Dim. 600x1781mm
		
AUSSENELEMENT «SWISSCROSS H.D.» Männlich / Weiblich Dim. 352/535/700x1200mm	**SWISSCROSS H.D. Systemaufbau**	**SCHUTZPLATTE**
		

«SWISSCROSS H.D.»

Check List

Bauherr: .....

Zuständig: .....

Objekt: .....

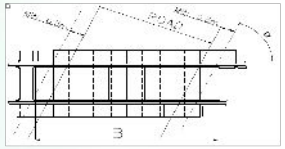
Bauvorhaben: .....

Auftragnehmer: Rex Articoli Tecnici SA - Via Catenazzi 1 - CH-6850 Mendrisio

Zuständig: .....

Bahnübergang Typ: Schwerverkehr ☐ Leichter Verkehr ☐ Fussgänger ☐ Andere .....

1 Spurweite: ☐ 1000 mm 1435 mm ☐ 1524 mm ☐ 3-Schienengleis



2 Breite des Bahnüberganges B: m .....

3 Strassenwinkel: Grad .....

4 Anzahl der Gleise: stk. .....

5 Innerelemente im Gleis: stk. ..... 1200mm ☐ 600mm ☐

6 Zenter-Elemente stk. ..... 600x1781mm ☐ Zugeschnitten ☐

7 Aussenelemente: stk. ..... 535mm ☐ 700mm ☐

8 Kupplungsschutzplatten notwendig: Ja ☐ Nein ☐ stk. .....

9 Schwellentyp: ..... Hersteller: .....

10 Schienentyp: ..... Hersteller: .....

11 Befestigung: Hersteller: .....

12 Schwellenabstand soll sein: **600 +/-10mm** Bestehend mm: .....

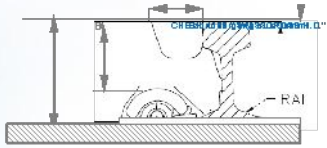
13 Vermessung Bahnschiene: (Ok = Oberkante)

H = Höhe Ok Schwelle und Ok Schienenkopf mm .....

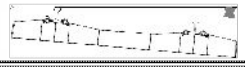
Hi = Höhe Ok Schienenbefestigung und OK Schiene mm .....

D = Höhe Ok Schienenkopf und Ok. Gummiplatte mm .....

L = Spurrillenbreite mm



14 Überhöhung A: mm .....



15 Kurvenradius R: m .....

16 Fahrzeugüberquerungen:

- Personenwagen Anzahl pro Tag: .....
- Lastwagen - TIR Anzahl pro Tag: .....
- Andere Anzahl pro Tag: .....

17 Andere Besonderheiten: .....

18 Lieferadresse: .....

19 Lieferdatum:

20 Montagetermin:

21 Montage/Montageaufsicht durch Rex Articoli Tecnici SA:

-Montage mit qualifiziertem Personal Ja ☐ Nein ☐

-Einschulung / Montageaufsicht Ja ☐ Nein ☐

22 Anschrift Bauherr: .....

23 Zuständig:

24 Spezielle Ausführungen: .....

25 Zeichnung des Bahnüberganges:

REX.CH RUBBER AND THERMOPLASTICS

www.rex.ch

SERVICE/PEDESTRIAN CROSSING «SWISSCROSS GFK» (FIBERGLASS)

INSTALLATION INSTRUCTIONS

TYPENZULASSUNG: CH-ZR44TZ2011-10-0014

«SWISSCROSS GFK» LEVEL CROSSING

«SWISSCROSS GFK» SWITCH/POINT

«SWISSCROSS GFK» WALKWAYS

«SWISSCROSS GFK» PIT COVERING

RUBBER AND THERMOPLASTICS

www.rex.ch

Service/pedestrian crossing «SWISSCROSS GFK»

INSTALLATION INSTRUCTIONS

Technical and sales reference information from Rex Articoli Tecnici SA

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RUBBER AND THERMOPLASTICS

Installation instructions

«SWISSCROSS GFK»

1. FIELD OF APPLICATION

These instructions apply to all SWISSCROSS GFK models of service passageways, footpaths, walkways, escape routes and rescue platforms, both outdoor and in tunnels. The exclusive laying system helps the integration with any type of track. To ensure the correct implementation design, we recommend the use of the check-list supplied with the offer. A free technical inspection on site is available from Rex Articoli Tecnici SA, upon customer request.

2. TOOLS AND MATERIALS REQUIRED FOR INSTALLATION (see enclosed list)

Laying surface
Tape meter, folding ruler, chalk, pencil
Level, straightedge
Hammer
Percussion drill with bits
Battery-powered screwer with inserts
Jigsaw, battery-powered
Circular saw with steel blade
Grinder, battery-powered with steel disc
Screwdriver kit, both flat blade and Philips
Allen wrench kit
Cricket wrench kit with accessories
Clamps
Square ruler

3 INSTALLATION

3.1 Setup

The assembly of SWISSCROSS GFK passageway does not require highly qualified technicians. However, we recommend an initial training and overview by a Rex specialist during the first installation. Services provided by Rex Articoli Tecnici SA include: onsite inspection, survey and evaluation, offer design and preparation. Supply and installation performed by qualified specialist are available upon request.

The location of the passageway should be marked according to the laying surface (or to local specifications). All other dimensions should be adjusted accordingly. In the level crossing area, the existing framework should be removed, if needed.

If crossing cannot be obstructed, the installation can be divided in two separate sections to be agreed with the clerks of works.

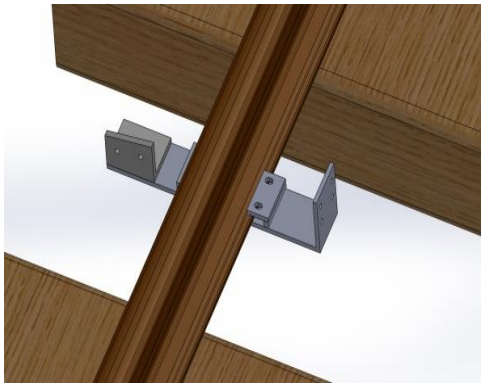
Installation instructions

«SWISSCROSS GFK»

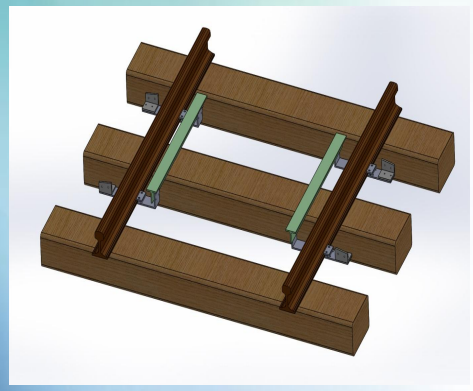
3.2 Installation

Mark the centre of the road level on the rails. The positioning starts from the central point from the left-hand towards the right respectively.
Mark the position of the supporting zinc-coated steel plates on the rails (laying surface), carefully removing the ballast under the rail foot to allow the positioning of the load-bearing plate.



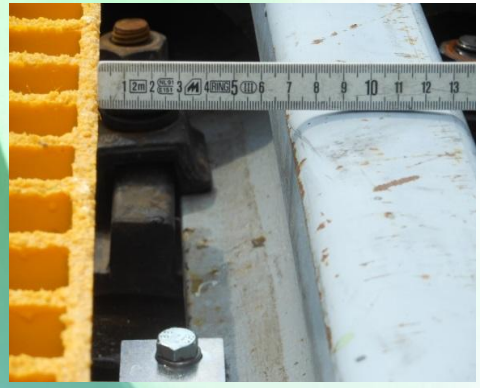


Identify the height of the load-bearing beam for the covering plates by means of the straightedge, placed on the head of the rails, taking into account that – according to the thickness of the plate, the upper edge of the covering plate should be positioned approximately 3 mm below the rail head (new rail). Load-bearing (GFK) fastening in parallel to the rail on the dedicated plate flaps or on the GFK angle brackets that have been previously assembled on the plate itself.



Installation instructions

«SWISSCROSS GFK»



Place the covering plates on the supporting beams, according to the type of tracks and laying surface characteristics. The track gauge will be 67 mm for standard gauge railways and 60 mm for narrow gauge ones. On the outer side of the rail, the plate must not be in contact with the rail itself. Expansion and vibration transmission. Open cuts can be closed by means of a U-shaped profile on GFK.

Installation instructions

«SWISSCROSS GFK»

Covering plate assembly with special fixing elements, usually about 4 fixing/sqm, or according to specific requirements.
To complete, install the protective plates between the rails by means of hanging hooks at the passage ends.

4. MAINTENANCE

4.1 Disassembly and reassembly of the service passageway

SWISSCROSS GFK passageways can be easily and quickly disassembled for track maintenance needs. However, in order to avoid issues and drilling of new holes to attach the items, we suggest to follow the indications below, especially for rail replacement. Prepare an accurate survey of the framework before removal, to enable the reassembly of all elements as previously installed. If needed, a Rex specialist is available for onsite inspection and assistance.

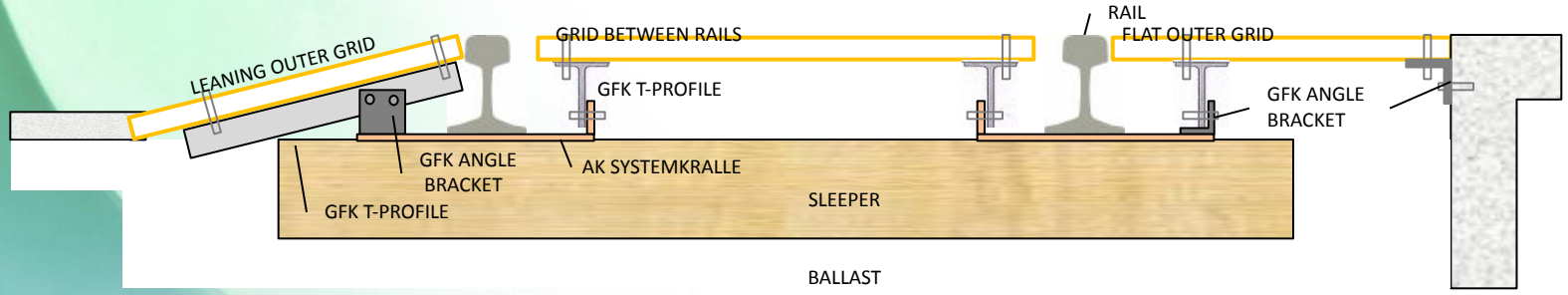
4.2 Maintenance

Due to the quality of the construction materials, SWISSCROSS GFK passageways do not require any particular maintenance.
Upon customer request, Rex provides a project-specific survey and maintenance manual.

Installation instructions
«SWISSCROSS GFK»

5. ITEM ASSEMBLY

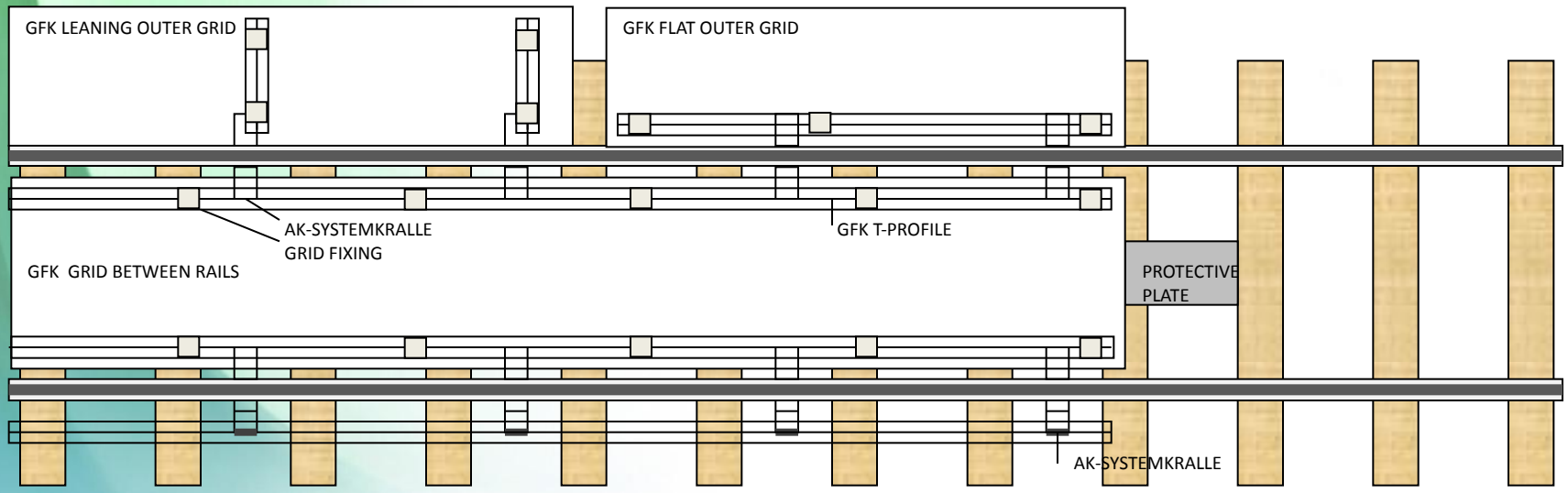
SECTION:
Sleeper: Wood – Cement - Steel

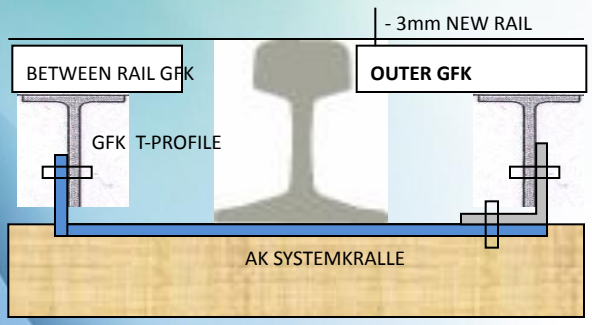


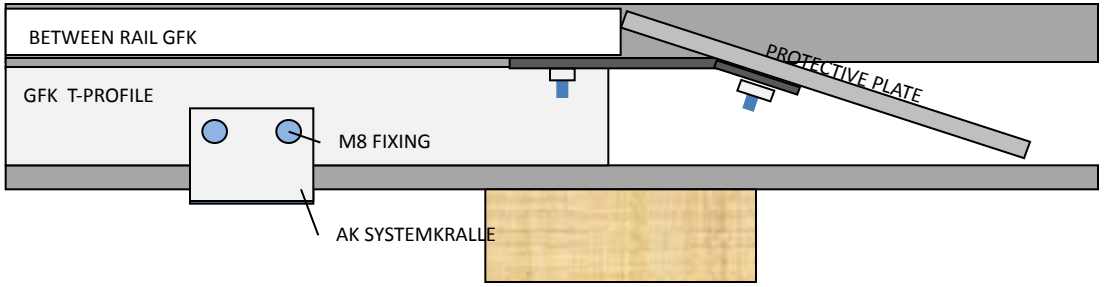
Installation instructions

«SWISSCROSS GFK»

5. ITEM ASSEMBLY







«SWISSCROSS GFK»

Check List

REX SA — RUBBER AND THERMOPLASTICS — IRIS Certification

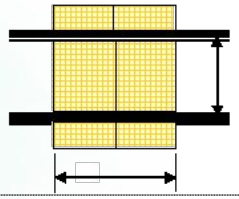
Commitente: .....
Responsabile: .....
Oggetto: .....
Opera: .....

Imprenditore: Rex Articoli Tecnici SA - Via Catenazzi 1 - CH-6850 Mendrisio
Responsabile:

Passaggio di servizio tipo:

Grigliato: ☐ Altezza 38mm ☐ Colore: Giallo ☐
Griglia a maglia chiusa: ☐ Altezza 42mm ☐ Colore: Griggio ☐
Altro: ..... Altezza mm: ..... Colore: .....

1 Scartamento A:
☐ 1000 mm
☐ 1435 mm
☐ 1524 mm
☐ 1600 mm
Altro mm: .....



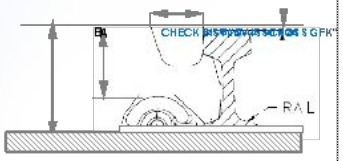
2 Larghezza del passaggio B: m .....
3 Numero dei binari: pz. .....

4 Interbinario: pz. .....
5 Intervia: pz. .....
6 Elemento esterno: pz. ..... Orizzontali ☐ Inclinati ☐
7 Elemento tipo: .....
7a Elemento tipo: .....
8 Piastra di protezione per ganci penderti: Si ☐ No ☐ pz. ....

9 Traversina tipo: ..... Fabbricante: .....
10 Rotaia tipo: ..... Fabbricante: .....
11 Attacco rotaia: ..... Fabbricante: .....

12 La distanza tra le traversine deve essere: 600 +/-10mm Rilevato mm:

13 Rilievo binario esistente: (Fs = Filo superiore)
H = Altezza Fs traversina e Fs Testa della rotaia mm .....
Hi = Altezza Fs attacco e Fs testa rotaia mm .....
D = AltezzaFs rotaia e Fs Grigliato mm .....
L = Larghezza gola mm .....



REX SA — RUBBER AND THERMOPLASTICS — IRIS Certification

14 Sopraelevazione A: mm

15 Raggio di curvatura: m
16 Infrastruttura: Ballast ☐ ..... Senza Ballast ☐ .....
Altro: .....
17 Altre catatteristiche: .....

18 Indirizzo di fornitura: .....

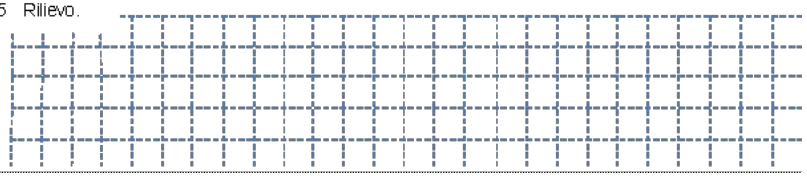
19 Termine di fornitura:
20 Termine di montaggio:

21 Montaggio/Assistenza Rex Articoli Tecnici SA:
-Montaggio con personale qualificato: Si: ☐ No: ☐
-Istruzione / Sorveglianza durante il montaggio: Si: ☐ No: ☐

22 Indirizzo committente: .....

23 Responsabile:
24 Esecuzioni speciali: .....

25 Rilievo.



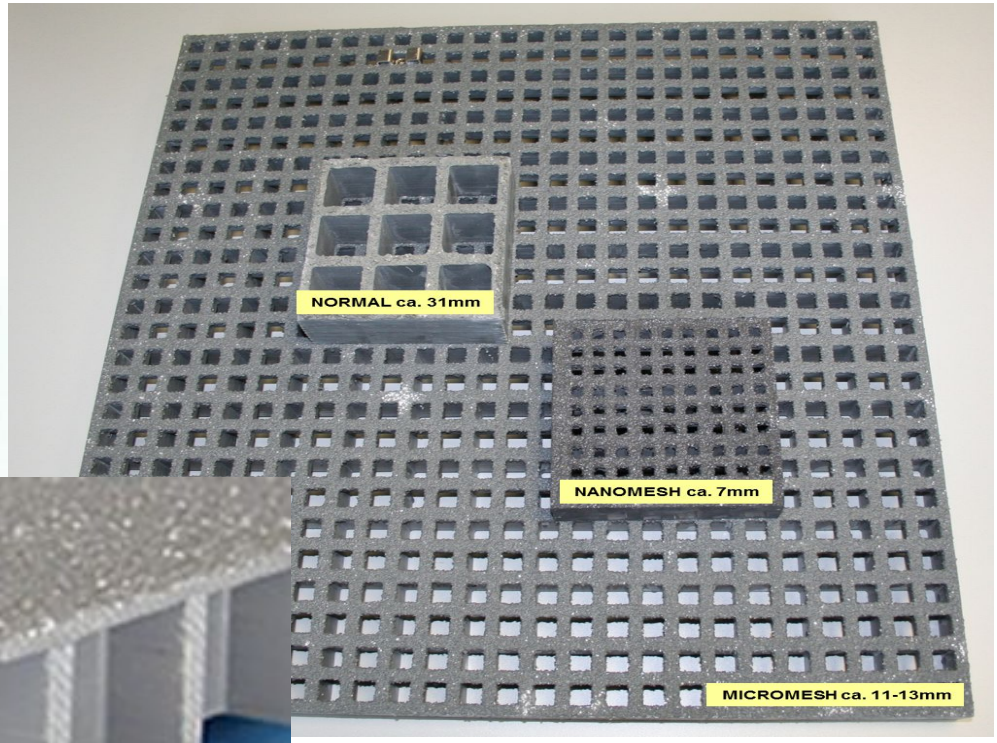
Ver. ott14

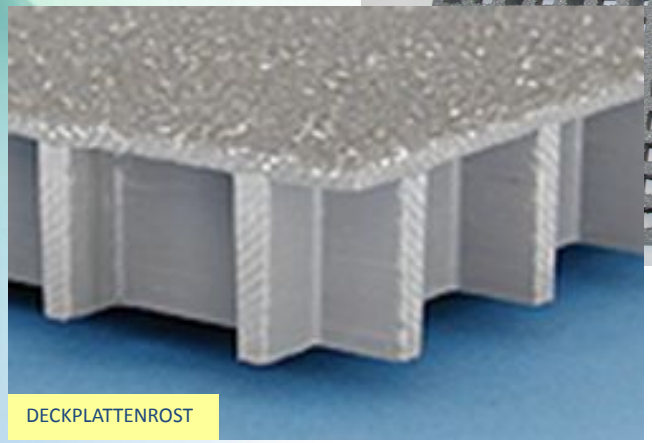
SWISSCROSS BAHNÜBERGANG PASSAGE À NIVEAU PASSAGGIO A LIVELLO RAIL LEVEL CROSSING

REX.CH RUBBER AND THERMOPLASTICS

«SWISSCROSS GFK»

Grid Dimensions





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Quality

Sustainability

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RUBBER AND THERMOPLASTICS

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