RAILS

BraunAbility

User Manual

EN Instructions for fitting and use

Thank you for choosing

Rails from BraunAbility!

The following manual is an important part of the product, providing you with information on how to achieve maximum performance and safe operation. Keep the manual in a safe place so that you can refer to it when necessary.

If you have any questions about your equipment, please contact us.

Once again, thank you for placing your confidence in our products!

Safe vehicle adaptation solutions

For your safety BraunAbility products are designed and tested according to current directives and standards.

Safety information

Fit and use

After care

Safety information

Limitation of use

Low Profile and Surface floor rails correctly fitted and secured with M8 fasteners, are capable of meeting the strength requirements of M1 load.

Heavy Duty rail, correctly installed, is capable of meeting the strength requirements of M1 load.

Surface rail is also designed for fitting to a vehicle side wall as a "cant rail" for third point occupant restraint fitment or can be use as location for equipment stowage.

Standard rail is suitable for use when mounted parallel to the longitudinal plan of the vehicle. Where the rail is to be mounted transversely, guidance should be sought from BraunAbility.

Due to certain vehicle geometry, in some cases the 30mm washer or underfloor spreader plate cannot be used. In such instances it is acceptable to use steel plate of equivalent strength and cross sectional area.

Multiple short lengths must not be used to create longer length rails. It is not recommended to have joins along the required length of rail.

LOW PROFILE RAIL

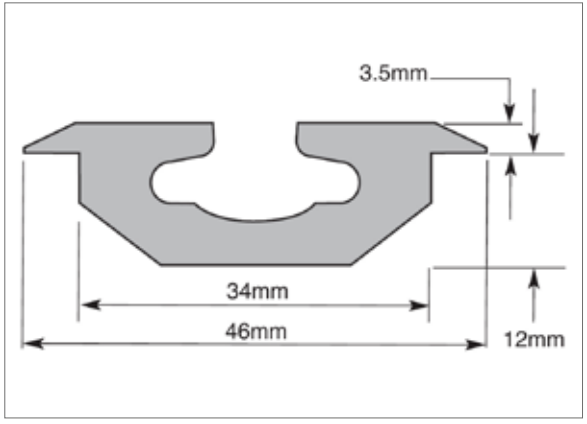
SURFACE RAIL

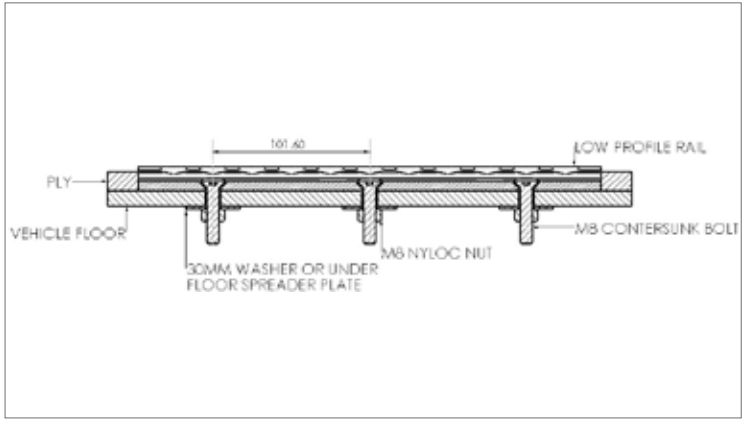
HEAVY DUTY RAIL

Fit and use

Fitting Low Profile Rail

1. Can be supplied undrilled for the base fixing holes or drilled and countersunk, and is produced in 1.15, 2.35, 3.68, 4.50 and 5 metre lengths.
2. There are 145 x 20 mm “scallops” in the top face and the base has 37 x M8 countersunk holes at 101.6 mm pitch for the fasteners.
3. All fasteners must be torque loaded to 11 Nm (8 foot pounds).
4. Specific end caps are available.
5. Recess in rail should be kept clear of debris to allow equipment to fit and move freely along the rails.
6. The floor rail is fixed to the vehicle structure using fasteners suitable for specific application.





Fit and use

Fitting Surface Rail

1. Can be supplied undrilled for the base fixing holes or drilled and countersunk, and is produced in 1.15, 2.35, 3.68, 4.50 and 5 metre lengths.
2. There are 145 x 20 mm “scallops” in the top face and the base has 37 x M8 countersunk holes at 101.6 mm pitch for the fasteners.
3. All fasteners must be torque loaded to 11 Nm (8 foot pounds).
4. Specific end caps are available.
5. Recess in rail should be kept clear of debris to allow equipment to fit and move freely along the rails.
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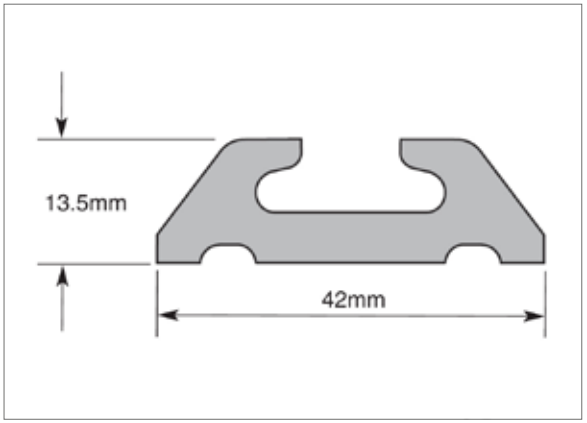
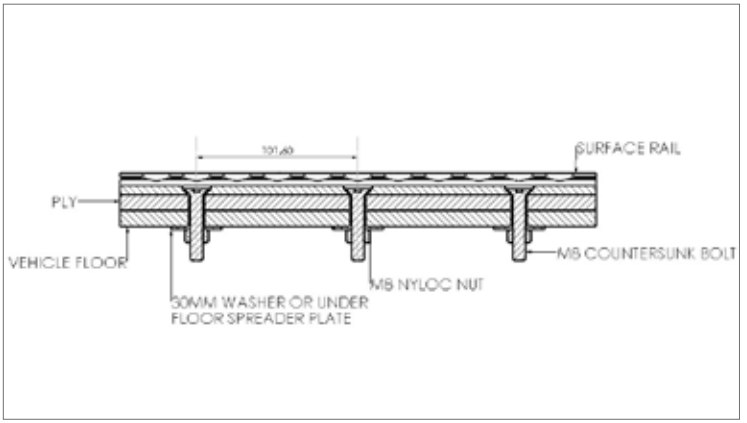




Fit and use

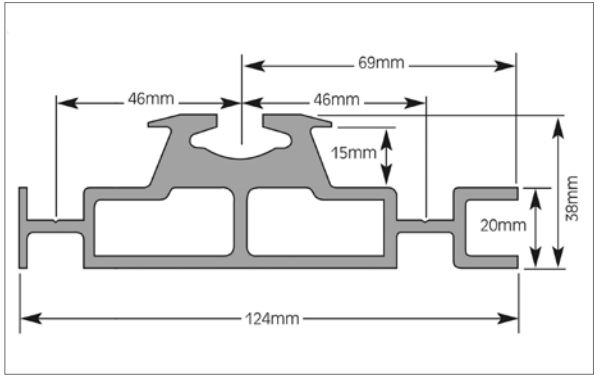
Fitting Low Profile and Surface Rails - Important notice

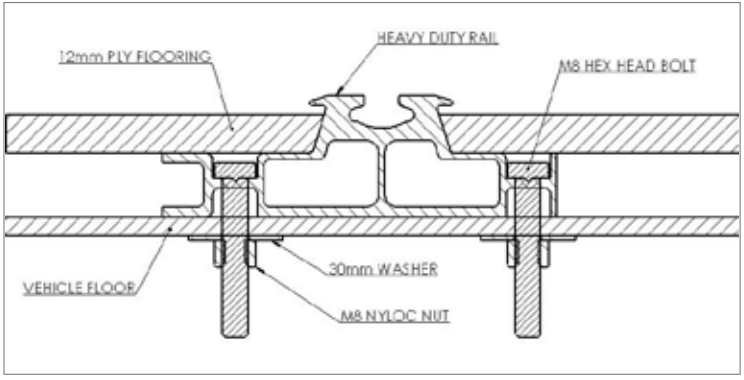
1. The minimum acceptable length of rail that can safely be installed in a vehicle to accommodate a wheelchair is 1300 mm. This will allow one wheelchair positioned centrally. The rail must be fitted ensuring fasteners are fitted to the extreme end hole positions.
2. For details of the space required within a vehicle for a wheelchair installation, reference should be made to the guidelines within the International standard ISO 10542-1 "Technical systems and aids for disabled and handicapped persons - Wheelchair Tiedown and Occupant Restraint Systems – Part 1: Requirements and test methods for all systems".
   Some vehicle layouts may have problems using Low Profile and Surface rail with pre-drilled countersunk holes due to under floor obstructions, such as box sections or angle brackets. In these situations where a hole is "missed", it is required to generate two new holes, one on either side of the original, with the maximum distance between them being 101 mm.
3. If the distance of the box section is greater than 101mm, we recommend drilling through the box section and adding a crush spacer to accommodate the new hole.
4. The original unused hole must finally be filled with a short self-tapping screw with a matching head.
5. It is critical that the installed rail is flat along its length and correctly positioned relative to any other rail lengths fitted in the vehicle floor. Elements within a pattern of rails must also be parallel to one another. This is particularly important if fitting Unwin "Fixed Base Equipment" or manufacturing removable seats, to ensure they will fit universally along the rails.
6. We recommend that installers use a rail jig to ensure that paired rails are parallel with each other within acceptable tolerances. Our seat fixtures, when correctly fitted to the seat legs, will accept a rail fitting tolerance of +/- 1mm on nominal set leg centres. Rail centre to centre variations outside this tolerance may lead to seats jamming or to seats not being able to be fitted easily in the rail at different positions.
7. Multiple short lengths must not be used to create longer length rails. It is not recommended to have joins along the required length of rail.

Fit and use

Fitting Heavy Duty Rail

1. Available in 3.95, 4.50, 4.9 and 5.5 metre lengths, this rail profile can be installed with a maximum unsupported span of 600 mm under normal conditions.
2. Additional fasteners must be fitted at the ends of the rail, in particular at the rear end.
3. Fasteners must be used on installation.
4. Bolts:- M8 steel, hexagon headed grade 8.8, plated, guide length 40 - 50 mm.
5. Nuts:- M8 steel, nyloc, grade 8, plated.
6. Washers:- M8 steel, plain, plated.
7. Torque settings:- 20 nm (15 lbs/ft).
8. Under Floor Reinforcement.
9. Contact BraunAbility for specific recommendations.





Fit and use

Accessories

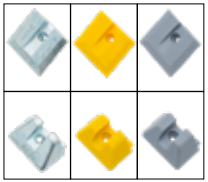
M8 Fasteners
(RF10 sets of 10, RF100 set of 100)

The standard fixing kit for each rail hole consists of:
- An M8 plated screw grade 10.9,
- An M8 Nyloc nut, - An M8 30 mm diameter plated steel washer.

All fasteners must be torque-loaded to 11 Nm/(8 ft/lb)

M8 Underfloor Spreader Plate
(USP)

Under-floor spreader plates are used with rail fasteners in place of washers to enable rail to be fitted to angled floor sections or where it would be difficult to position a washer.



End Caps
(LPEC, RECLY,RECLG, SEC, RECSY, RECSG)

Line up the end cap squarely to the end of the installed rail, ensuring that the slugs locate correctly under the rail end.
Using the end cap as a guide, drill through and secure using a no.6 counter sunk wood screw.

Rail Trim
(RT04, RT25)

Designed to keep the rail track clean from dirt. Slides into the rail central channel and can be cut to size.

Rail Insert
(INS)

Protext the rail from debris. Come in 305mm length and is pushed through the rail central channel.

Rail Jig
(RJ)

Ensure perfect alignment of rail (330mm centre to centre) during installation, to avoid fitment issue .

After care

Equipment storage and maintenance

- Rail inserts or strips can be fitted to unused rail sections to aid housekeeping.
- Regular inspection should be carried out to check for rail damage and corrosion.
- Rails should never come into to contact with strong acid/ alkaline solutions as this will degrade the appearance and strength of the rail.
- If you intend to use a proprietary cleaner on or near the rails, advice should be sought from its manufacturer to ensure it does not degrade the appearance and strength of the rail sections.

Warranty

BraunAbility products are extensively tested using BraunAbility anchorage systems, and our full warranty normally only applies to BraunAbility equipment when used with BraunAbility branded anchorages or as instructed.
BraunAbility have also participated in test programs with other manufacturers anchorage products and will support warranty on the BraunAbility products when used in conjunction with such jointly tested systems. For further details on specific applications please contact the Sales Office. In other situations, using BraunAbility products, for which BraunAbility has not participated in a joint test program, a limited BraunAbility warranty will apply.

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BraunAbility Europe AB
Åkerivägen 7
443 61 Stenkullen
Sweden

Phone: +46 302 254 00
E-mail: info@braunability.eu
www.braunability.eu