

Safety Without Compromise



### **TBØLT**

#### THE T BOLT RAIL ADVANTAGE:

- Compatible with Koller T Bolt Seat Fixings
- Seats can be secured in any position (using Koller T Bolt Seat Fixings) for maximum positional flexibility
- Angled edges for a neat and tidy finish by lying over the floor covering
- Can be manufactured to customer-specific requirements



Recessed into the vehicle floor, Koller T Bolt Rail is the most costeffective way to change a vehicle's seating layout where seats only need to be moved occasionally.

Recessed into the vehicle floor, Koller Low Profile

Rail is the safe and simple way to change a vehicle's seating/wheelchair layout, while also providing a professional, unobtrusive finish.

### LOWPROFILE

#### THE LOW PROFILE RAIL ADVANTAGE:

- Extensively tested to ECE 14.05 and EEC76/115 as amended by 96/38/EC to M1 and M2 loading in-vehicle and on test "platforms"
- Successfully crash tested to ISO 10542 for wheelchairs up to 200kg PLUS passenger
- Can be used stand-alone, or with Smartfloor (providing a fully tested and approved floor)
- Compatible with Koller Wheelchair/Passenger Restraints and Seat Fixings
- Seats and restraints simply click into the rail and lock in place
- Angled edges for a neat and tidy finish by lying over the floor covering
- Can be manufactured to customer-specific requirements



### SURFACE

Koller Surface Rail allows a safe and simple way to change a vehicle's seating/wheelchair layout when it is not possible or economical to fit other types of rail or floor systems.

#### THE SURFACE RAIL ADVANTAGE

- Successfully tested to M1 loading for single seats
- Compatible with Koller Wheelchair/Passenger Restraints and Seat Fixings
- Enables safe and simple changes to a vehicle's layout
- Seats and restraints simply click into the rail and lock in place
- Fitted to the surface of the vehicle floor for easy installation
- Can be manufactured to customer-specific requirements





# SMARTFL SOR

Smartfloor has been tested and approved to M1 in all major bus models. It achieves this by using strong and lightweight interlocking aluminium alloy sections that are bonded to the vehicle floor.



#### THE SMARTFLOOR ADVANTAGE:

- Smartfloor is M1 certified in compliance with UN Regulations UNECE R14, R16 and R17 for all major bus models
- Accepts Koller Low Profile Rail, ensuring compatibility with Koller removable seat fixings and wheelchair restraints
- Bolted Low Profile Rail ensures any inadvertently damaged rail is easily replaced and vehicle use restored
- Provides total layout flexibility for removable seats and wheelchairs
- Low Profile Rail angled edges provide a neat and tidy finish by lying over the floor covering
- Customised floor layout to individual requirements



PLEASE CONTACT US TO DISCUSS A FLOOR LAYOUT/PLAN.

# RAIL FIXINGS AND RAIL ACCESSORIES

Shaped to match the profile of Koller Low Profile and T Bolt rails, the Koller Low Profile Rail End Cap provides a neat finish to the vehicle rail ends.

#### THE LOW PROFILE RAIL END CAP ADVANTAGE:

- Compatible with Low Profile and T Bolt rails
- Protects the end of the plywood floor
- Easily fixed in place with a self tapping screw
- Channel to aid rail cleaning



Koller M8 Rail Fixing Set - recommended when fitting M8 Low Profile, Surface and T Bolt rails.

#### THE KOLLER M8 RAIL FIXING SET ADVANTAGE:

- Recommended to meet M1 load floor installations
- Also suitable for M2 load floor installations
- Zinc plated for corrosion prevention, each set comprises: M8 x
   45 Countersunk Socket Head Screw, Nyloc Nut and Washer



Koller M8 Spreader Plates are used in place of washers, particularly on angled floor sections or anywhere it is difficult to fit a standard washer.

#### THE M8 SPREADER PLATE ADVANTAGE:

- Zinc plated to protect from corrosion
- Manufactured from 3mm formed steel
- Pre-drilled for M8 fixing



Koller Rubber Rail Insert prevents debris from entering the vehicle rails.

#### THE RUBBER RAIL INSERT ADVANTAGE:

- Inserted via the top of the rails to sit flush with the top
- Supplied in 12" (305mm) lengths
- Compatible with Low Profile and Surface Rails



Koller Rubber Rail Cover Strip prevents debris from entering the vehicle floor rails.

#### THE RUBBER RAIL COVER STRIP ADVANTAGE:

- Supplied by metre, up to 25m
- Simply cut to required length and push to fit into the rail
- Compatible with Low Profile, Surface and T Bolt rails
- Grey to match rails, but can be supplied in other colours (MOQ applies)



Shaped to match top profile of Koller Surface Rail, the Koller Surface Rail End Cap provides a neat finish to the vehicle rail ends.

#### THE SURFACE RAIL END CAP ADVANTAGE:

- Protects the end of the plywood floor
- Easily fixed in place with a self tapping screw
- Channel to aid rail cleaning





## LOCKABLE

The Koller Aluminium Lockable seat fixing is the lightest, simplest to operate and most cost-effective product of its type available, enabling seats to be moved easily to provide a flexible vehicle layout that can be changed to suit operators' requirements.

#### THE ALUMINIUM LOCKABLE ADVANTAGE:

- Versatile fits most removable minibus type seats
- The lightest (approx. 500g) and quickest to use M1 load-tested removable seat fixing
- Strong tested to M1 loads on single seats and M2 loads on double seats
- Ergonomic locking device Auto -locking and simple twist unlock action
- Anti-rattle mechanism to reduce or eliminate annoying seat rattle
- Simply drops into floor rails (tracking) and securely locked with a plunger



#### THE STEEL LOCKABLE ADVANTAGE:

- Versatile fits most removable minibus type seats
- Strong tested to M1 loads on single seats and M2 loads on double seats
- Ergonomic locking device Auto -locking and simple twist unlock action
- Anti-rattle mechanism to reduce or eliminate annoying seat rattle
- Simply drops into floor rails (tracking) and securely locked with a plunger
- Colour-coded key components for easy identification

The Koller Steel Lockable is an easy to operate and cost-effective seat fixing, enabling seats to be moved easily to provide a flexible vehicle layout that can be changed to suit operators' requirements.







The Koller T Bolt is the most cost-effective solution for configuring a vehicles seating layout where seats are only moved occasionally.

#### THE T BOLT RAIL ADVANTAGE

- Versatile fits most removable mini-bus type seats
- Strong tested up to M1 loads
- Lightweight only 75g each (approx.)
- Captive design for security T Bolt can only be removed from the end of the rail
- No annoying seat rattle
- Compatible with Koller Low Profile, Surface and T Bolt Rails





GENESIS 85
Using tried and tested parts along with our engineering

skills, Koller have produced GENESIS 85 - the safe way of securing wheelchairs and their passengers that won't break the bank.

#### THE GENEISIS 85 ADVANTAGE:

- Crash tested to ISO 10542
- J hooks all round quick and easy to fit and "non-handed"
- Special double-plunger rear rail clips for strength
- Combined rear straps feature EXCEL Compact over-centre buckles to achieve shorter belt lengths
- Static lap and diagonal belts offer easy adjustment for individual fit
- Future-proof; a 3-point (upper anchorage) belt can be added at any time
- Diagonal belt can be fitted to either shoulder



# EXCEL120 combined

The Koller EXCEL 120 Combined restraint - the first product of its type on the market. It has been continually improved to provide the most durable and space-saving restraint in a cost-effective package.

#### THE EXCEL 120 COMBINED ADVANTAGE:

- Wheelchair tie-down straps exceed ISO 10542 by 41%.
   Crash-tested for wheelchairs up to 120kg PLUS passenger
- EXCEL Compact rear tie-down straps for increased adjustability
- Special double-plunger rear rail clips for strength
- Universal TITUS harness for maximum passenger comfort and safety
- Choice of karabiner or buckle and tongue fittings
- Fixed length front straps for ease of fitting
- Wide webbing on all tie-down straps for strength and wheelchair stability



# NEXXUS 200

NEXXUS 200 - the World's strongest combined wheelchair and passenger restraint from Koller. The NEXXUS system meets the most demanding restraint needs, ensuring a passenger can travel in almost any wheelchair in complete safety.

#### THE NEXXUS ADVANTAGE:

- Wheelchair tie-downs exceed ISO 10542 by 135%.
   Crash-tested for wheelchairs up to 200kg PLUS passenger
- Twin rear tie-down straps for maximum strength
- Koller designed karabiners for ease of use with superior strength
- Rear mini lockable type fittings with double plunger system for safety
- Universal TITUS passenger harness for maximum comfort and safety
- Tried and tested components for durability and function
- Wide webbing on all tie-down straps for strength and wheelchair stability





The Koller EXCEL Heavy Duty 4-point - the simple to operate, versatile wheelchair restraint.

#### THE EXCEL ADVANTAGE:

- Tie-down straps exceed ISO 10542 by 35%. Crashtested for wheelchairs up to 114kg
- EXCEL Compact over-centre buckle rear straps for maximum adjustability and tensioning
- Static front straps for easy wheelchair alignment
- Wide webbing used throughout for strength and wheelchair stability
- Black webbing looks good for longer
- Choice of Koller karabiner or buckle & tongue fittings

**NOTE: MOST BE USED WITH A TITUS PASSENGER HARNESS** 

\_\_\_\_\_\_



### EXCEL **APOLLO**

The Koller EXCEL Apollo is the complete passenger and wheelchair restraint system for when it is not desirable or possible to fit rail.



- Wheelchair tie-down straps exceed ISO 10542 by 30%. Crash-tested for wheelchairs up to 110kg PLUS occupant
- Low profile spigots for professional installation
- Easy to install to most floor types two different plates and spacer available
- Positive locking can only be released by operating a release pin
- Choice of Koller karabiner or buckle & tongue fittings
- Universal TITUS passenger harness for maximum comfort and safety
- Wide tie-down webbing for strength and wheelchair stability

\_\_\_\_\_\_







## CEL ARIES





**The Koller EXCEL Aries Combined Wheelchair & Passenger Restraint** is the first commercially available restraint designed specifically to fit VW T5 Caravelle rail. 'Aries' enables the Caravelle to become 'wheelchair friendly' by simply removing or repositioning the rear passenger seats.

#### THE EXCEL ARIES ADVANTAGE:

- Crash-tested to ISO 10542
- No vehicle modifications required uses the rail already in the vehicle
  • Precision machined 'carriages' provide
- secure anchorage in the rails
- Quick release tie-down fittings for fast release in an emergency and security
- Universal TITUS passenger harness for maximum comfort and safety
- EXCEL Compact over-centre buckle rear straps for maximum adjustability and tensioning
- Wide wheelchair tie-down webbing for strength and wheelchair stability



Koller i-ON - the High-Capacity electrical wheelchair tiedown retractor, extendable to 3.75 metres. i-ON is designed for where space inside a vehicle is too restricted to fit conventional front tie-down straps.

#### THE I-ON ADVANTAGE:

- High-Capacity; extendable up to 3.75m
- Crash tested to ISO 10542
- Fits to the front of the wheelchair outside the vehicle before wheeling inside
- Integrated belt guides stops webbing from twisting
- Choice of quick-release fittings karabiner or buckle and tongue
   Black webbing blends in with vehicle interiors

NOTE: MUST BE USED WITH SUITABLE REAR TIE-DOWN STRAPS AND PASSENGER HARNESS I.E. EXCEL COMBINED, FAST COMBINED ETC.



### FAST RS combined

The Koller FAST RS Combined provides a unique combination of safety, space saving, speed of operation and cost in a restraint system.

#### THE FAST RS COMBINED ADVANTAGE:

- Self-tensioning system using heavy duty **FAST retractors**
- Dual Handles on FAST retractors suitable for left and right-handed users
- Durable metal covers on FAST retractors protect retractors and webbing
- Fixed length front straps for ease of fitting
- Available with Koller karabiner or buckle & tongue fittings
- Universal TITUS passenger harness for maximum comfort and safety
- Wide webbing on all tie-down straps for strength and wheelchair stability





The Koller FAST Combined restraint is a space-saving system with the advantage of simple and quick to operate FAST retractors all round.

#### THE FAST COMBINED ADVANTAGE:

- Space-saving, FAST to operate all-in-one wheelchair and passenger restraint system
- Crash tested front & rear sub-assembles to ISO 10542
- Self-retracting, fully adjustable, Heavy Duty FAST retractors all round
- Dual-Tensioning handles suitable for left and right-handed users
- Durable FAST metal covers provide retractor and belt protection
- Universal TITUS passenger harness for maximum comfort and safety
- Wide webbing on all tie-down straps for strength and wheelchair stability



### FAST APOLLO

The Koller FAST Apollo represents the ultimate passenger and wheelchair restraint system when it is not desirable or possible to fit rail.

#### THE FAST APOLLO ADVANTAGE:

- Crash tested front & rear sub-assemblies to ISO 10542
- Low Profile stainless steel spigots for durability and professional installation
- Easy to install to most floor types two different plates and spacer available
- Self-retracting, fully adjustable, Heavy Duty FAST retractors all round
- Dual Tensioning FAST handles suitable for left and right-handed users
- Durable metal FAST covers for retractor and webbing protection
- Universal TITUS passenger harness for maximum comfort and safety



### FAST ARIES



The Koller FAST Aries Combined Wheelchair & Passenger Restraint takes the same principals as used in the EXCEL Aries, but utilises the benefits of using FAST retractors.

#### THE FAST ARIES ADVANTAGE:

- Fittings designed to specifically fit in the VW T5 Caravelle using manufacturer's rail already installed
- No vehicle modifications required
- Self-retracting, fully adjustable, Heavy Duty FAST retractors all round
- Dual-tensioning FAST handles suitable for left and right-handed users
- Durable metal FAST covers for retractor and webbing protection
- Universal TITUS passenger harness for maximum safety and comfort
- Wide webbing on FAST tie-downs for strength and wheelchair stability

## **FASTRS**

The Koller FAST RS provides the best combination of safety, simplicity, fast operation and cost in a wheelchair restraint system.

#### THE FAST RS ADVANTAGE:

- Cost-effective wheelchair restraint system incorporating FAST operation
- 1SO 10542 crash tested front & rear tie-down subassemblies
- Self-retracting, fully adjustable, Heavy Duty FAST retractors all round
- Dual Tensioning Handles on rear FAST straps suitable for left and right-handed users
- Durable metal covers protect retractors and webbing
- Available with Koller karabiner or buckle & tongue fittings

NOTE: MUST BE USED WITH A TITUS PASSENGER HARNESS





Designed for operation where time is of paramount importance, the essence of the Koller FAST wheelchair restraint lies in it's flexibility, speed and ease of use.

#### THE FAST ADVANTAGE:

- Crash tested to ISO 10542
- FAST to operate, self-retracting, Heavy Duty, fully adjustable FAST straps all round
- Dual -Tensioning handles suitable for left and right-handed users
- Durable metal covers protect retractors and webbing
- Wide webbing on all straps for
- strength and wheelchair stability
   Available with Koller karabiner or buckle & tongue fittings

NOTE: MUST BE USED WITH A TITUS PASSENGER HARNESS



### TITUS

The Koller Universal TITUS harness provides maximum passenger comfort, safety and is "Future-proofed"; it can be used as a "conventional" 2-point lap and diagonal harness, or as a 3-point harness.

#### THE TITUS ADVANTAGE:

- Crash tested to ISO 10542 stand-alone and as part of Koller combined restraint systems
- Optional upper anchorage belt to convert into a full 3-point harness
- Simple to fit pull the belts from the retractor housing, place around the passenger and clip in place
- Colour-coded belts for easy identification
- Fitted as standard on Koller combined restraint systems
- "Split-reel" design to accommodate passengers in all designs of wheelchair
- Covers on retractors and stalk buckle for durability and protection

NOTE: MUST BE USED WITH A SUITABLE 4-POINT WHEELCHAIR RESTRAINT I.E. FAST, EXCEL ETC.



### RESTRAINT ACCESSORIES

Koller Adapta Rings increase the flexibility of wheelchair tie-down straps with karabiner fittings.

#### THE ADAPTA RING ADVANTAGE:

- Simple to use wrap around the wheelchair frame and snap the karabiner through both rings
- Suitable for wheelchairs upto 120kg
- Wide black webbing for strength and durability





Fitted to the shoulder strap of a passenger harness, the Koller Padded Shoulder Support provides additional passenger comfort.

#### THE PADDED SHOULDER SUPPORT ADVANTAGE:

- Provides additional passenger comfort by protecting the user from chaffing by seatbelt webbing
- Suitable for seated and wheelchair passengers
- Easy to install simply wrap around the belt and secure using the hook and loop fastening

Fitted around the chest or waist, the Koller Support Belt provides additional support for passengers with little upper body strength.

#### THE SUPPORT BELT ADVANTAGE:

- Helps support passengers with little upper body strength in seats and wheelchairs
- Adjustable in length

**NOTE: MUST BE USED WITH A PASSENGER HARNESS** 



The Koller TITUS Extension Strap increases the effective length of all our TITUS passenger harnesses.

#### THE TITUS EXTENSION STRAP ADVANTAGE:

- Simply clips inbetween the shoulder belt and stalk
- Adjustable in length



#### The Koller Wheelchair Storage Strap safely secures a folded manual wheelchair in a vehicle during transit.

#### THE WHEELCHAIR STRORAGE STRAP ADVANTAGE:

- Easy length adjustment via cam buckle
- Single stud fitting on each end to clip into rails





## TITAN

Koller 'TITAN' Telescopic Ramps provide a simple, safe and versatile solution for wheelchair vehicle access, or to overcome obstacles. Available in three lengths, they are suitable for most vehicles, including estate cars, MPVs, converted wheelchair accessible vehicles, taxis, motorhomes and minibuses.

#### THE TITAN ADVANTAGE:

- Telescopic design closes down to compact dimensions for easy handling and storage
- Made from extruded aluminium alloy for strength and lightness
- Weather resistant anti-slip surface and raised sides for safety
- Locking Device prevents accidental opening and prevents rattle in transit
- Durable powder coated surface ensures sections slide freely
   Available free-standing or with hinged "Fixing Kit" (suited to electric powered wheelchairs)
   CE marked with SWL of 300kg per pair
- Available lengths:5ft (1.5m); 7ft (2.1m); 8ft (2.4m)















Tel: +44 (0)1935 426695

Fax: +44 (0)1935 433766

Email: enquiries@koller.co.uk

Koller Engineering Ltd, 5 Garrett Road, Lynx Trading Estate, Yeovil, Somerset BA20 2TJ

Issue 1 February 2016 // Copyright © 2016 Koller Engineering Ltd // All rights reserved -