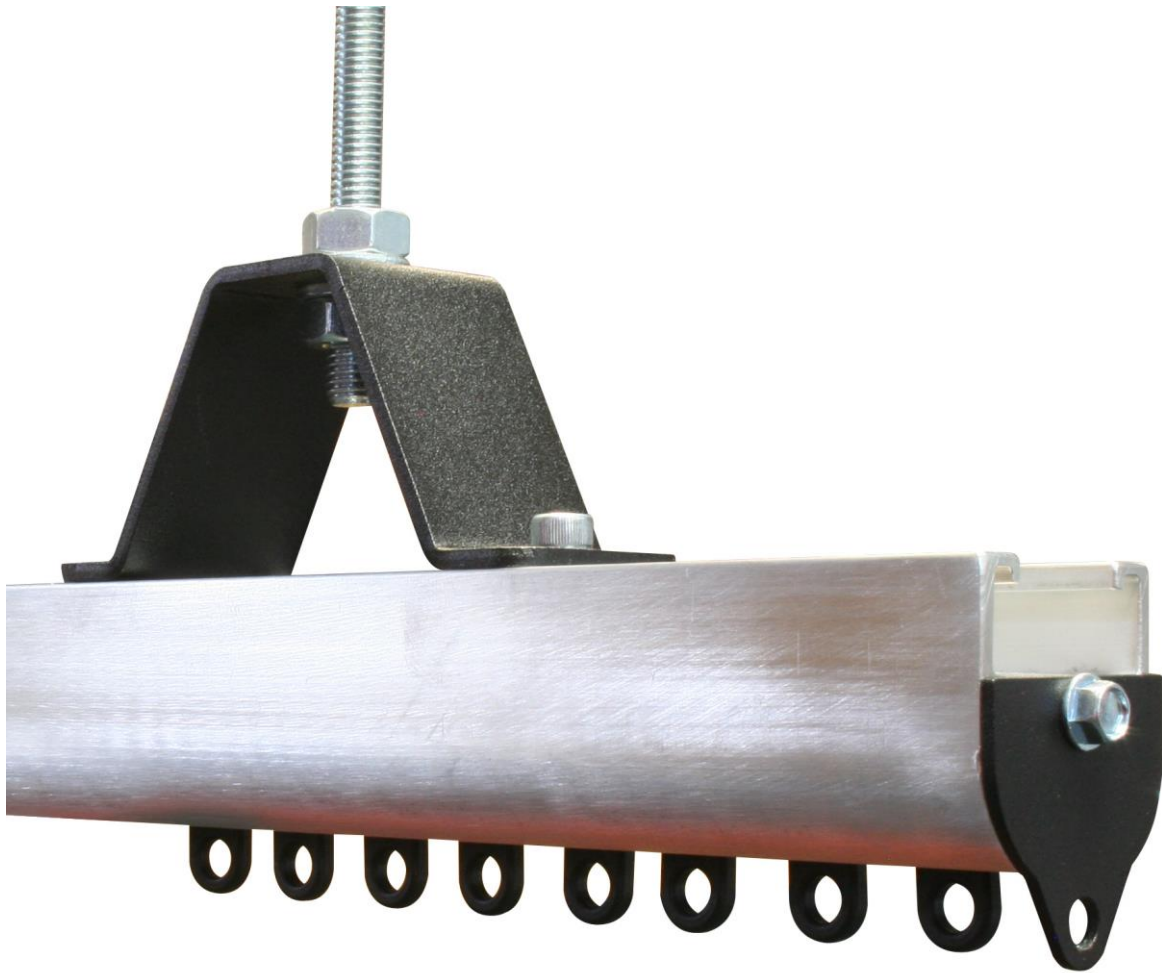




Engineering Ltd

Doughty Rail User Manual



IMPORTANT – READ CAREFULLY BEFORE USE – KEEP FOR FUTURE REFERENCE

User Manual Revision 2 Issued October 2019

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1) SAFETY NOTES

Before installing and operating Doughty Rail, please read this manual carefully and pay attention to the information provided. Use this manual to familiarise yourself with the Doughty Rail, its proper use and safety regulations.

DANGER

DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

WARNING

WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION: Indicates a hazardous situation which could result in minor or moderate injury.

NOTICE

NOTICE: address practices not related to personal injury.

SAFETY INSTRUCTIONS

SAFETY INSTRUCTIONS: is used for lists of steps, procedures or instructions that might otherwise substitute a DANGER, WARNING or CAUTION notification.

2) GENERAL

Doughty Rail is an extruded aluminium curtain rail system equipped with ball raced curtain runners. There is a range of brackets designed to suspend the rail in most situations. Doughty Rail is available in straight lengths from one to three metres and four radius curves. The top suspension channel is dimensioned to work with 'Unistrut' nuts. Available in powder painted black or natural aluminium.

Main features:

- Low profile extruded aluminium section.
- Can be cut to length in site.
- Single swipe or overlap curtains.
- Ball raced runners with 6kg working load limit (WLL).
- Walkalong systems only.

Doughty Rail is strictly for professional use. Only competent persons are permitted to install and use Doughty Rail. A competent person in this respect is an individual with relevant technical education, training and/or experience enabling him or her to perceive risks and to avoid hazards occurring during use of a product.

Doughty has endeavoured to deliver the highest degree of accuracy possible. However, continuous improvement of our products is a Doughty Policy. Therefore, product specifications are subject to change without notice.

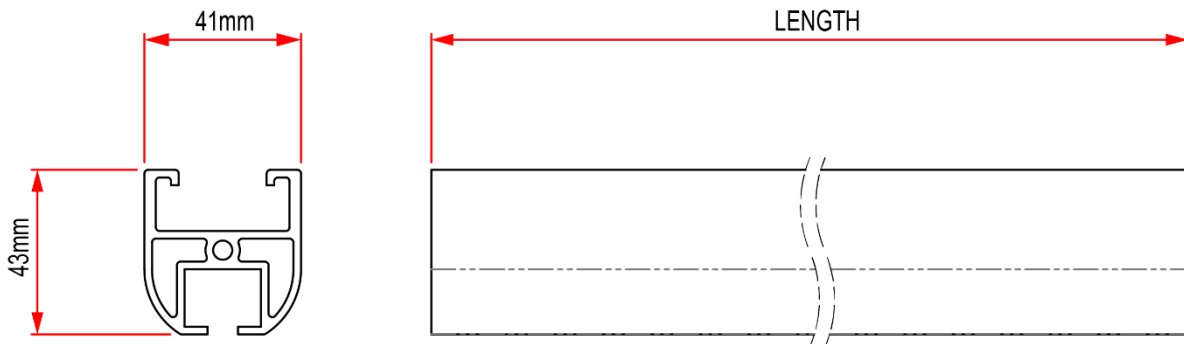
Readers and users are encouraged to notify Doughty of errors and send in suggestions for improvement. All communications will be carefully considered for future printings of this manual and changes to our products.

3) DOUGHTY RAIL RANGE

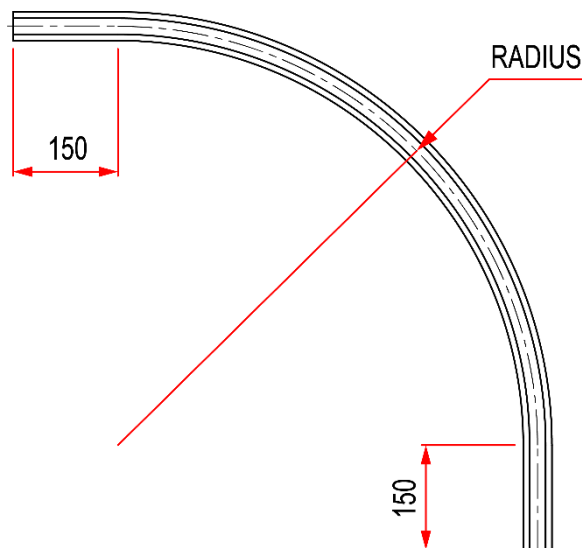
Doughty Rail is a curtain track system made up from a variety of interchangeable parts to form a flexible, efficient system.

Doughty Rail – parts List

T81000.....	Doughty Rail – Straight 1.0m – Silver
T81001.....	Doughty Rail – Straight 1.0m – Black
T81010.....	Doughty Rail – Straight 2.0m – Silver
T81011.....	Doughty Rail – Straight 2.0m – Black
T81020.....	Doughty Rail – Straight 3.0m – Silver
T81021.....	Doughty Rail – Straight 3.0m – Black



T81050.....	Doughty Rail – Curve R45 – Silver
T81051.....	Doughty Rail – Curve R45 – Black
T81060.....	Doughty Rail – Curve R60 – Silver
T81061.....	Doughty Rail – Curve R60 – Black
T81070.....	Doughty Rail – Curve R75 – Silver
T81071.....	Doughty Rail – Curve R75 – Black
T81080.....	Doughty Rail – Curve R90 – Silver
T81081.....	Doughty Rail – Curve R90 – Black



T81100	Doughty Rail – Joint Kit (includes Joint Pin)
T81105	Doughty Rail – Joint Pin
T81110	Doughty Rail – Ceiling Bracket
T81120	Doughty Rail – Corner Ceiling Bracket
T81140	Doughty Rail – 25mm Top hat
T81150	Doughty Rail – 50mm Top hat
T81160	Doughty Rail – End Stop
T81161	Doughty Rail – Slide In End Stop
T81170	Doughty Rail – Wall Bracket
T81190	Unistrut Nut M6
T81191	Unistrut Nut M8
T81192	Unistrut Nut M10
T81200	Doughty Rail – Ball Raced Runner

4) LIMITATIONS OF USE

- Doughty Rail can be operated in -20° Celsius up to +60° Celsius.
- Doughty Rail is for indoor use only.
- The use of Doughty Rail is the sole responsibility of the user.
- To use Doughty Rail the user must observe the instructions to be found in this manual.
- All persons who use Doughty Rail must be acquainted with this manual and must be informed about its potential hazards.
- It is also imperative to observe the local accident prevention regulations and/or occupational health and safety regulations.
- Using this product for any other purpose than that described in this manual is considered contrary to its designated use and the manufacturer cannot be held liable for any damage resulting from such use.
- The manufacturer is not liable for indirect consequential damage and financial loss. The manufacturer shall not be liable for any changes made to the device nor for any damage resulting from such changes.








5) MODIFICATION

Doughty Rail components should not be modified in any way. If there is a requirement for non-standard Doughty Rail parts for a special purpose please contact your Doughty agent.

Only use Doughty approved spares.

6) SAFETY INFORMATION

WARNING

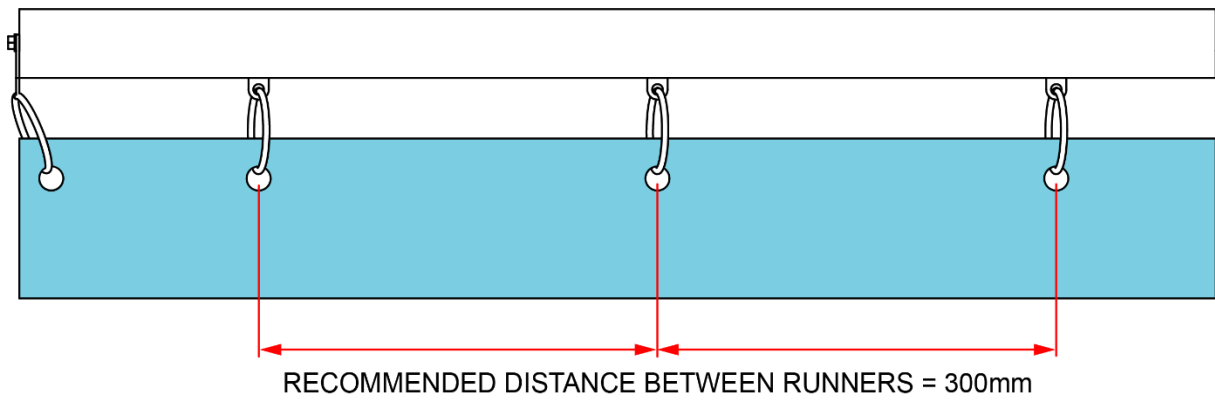
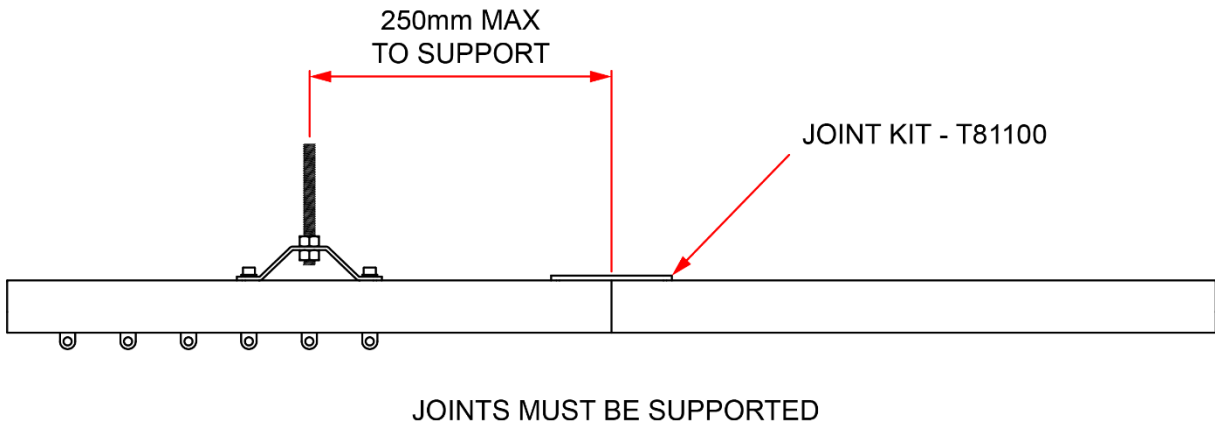
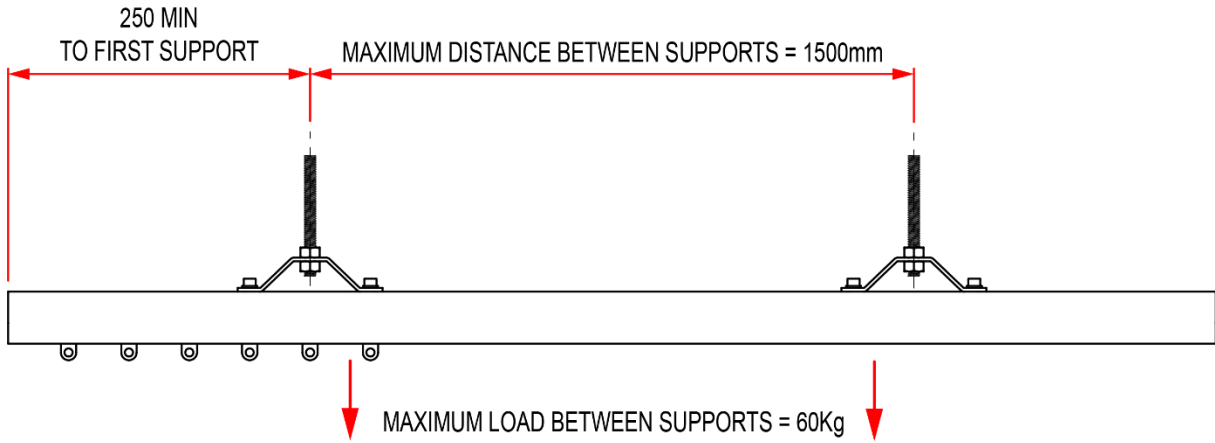
-  Do not exceed any working load limit (WLL) indicated.
-  Doughty Rail must only be installed by qualified/competent personnel.
-  When installing or using Doughty Rail appropriate personal protective equipment must be used suitable for the environment being worked in.
-  Ensure the installation is suitable for the application.
-  Doughty Rail shall be inspected by a competent person as often as required but with a minimum of once a year and maintain written records.
-  Doughty Rail must be taken out of service immediately if, during use, repair or maintenance any serious damage is discovered.
-  Repairs can be undertaken only by authorised (Doughty trained) personnel. If in any doubt contact the manufacturer.

7) TRANSPORT AND STORAGE

- Before Doughty Rail systems are put into storage they must be checked for defects. Defective Doughty Rail components must be clearly marked and put aside so they cannot be re-used.
- Ensure the product is stored and kept in a dry, ventilated place to avoid corrosion.

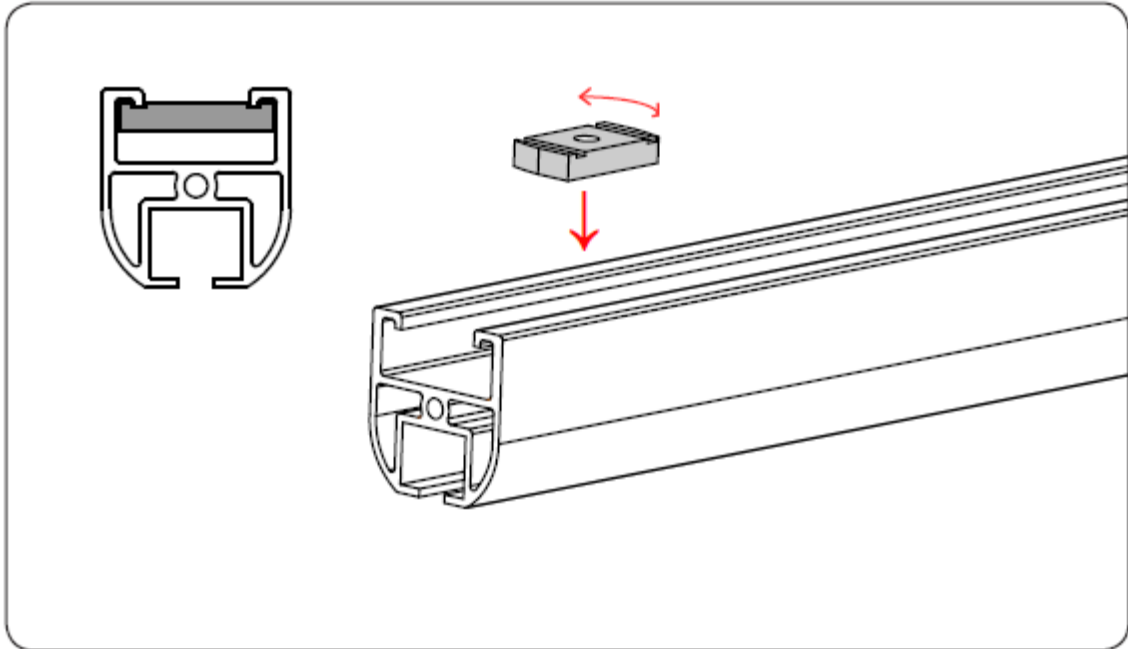
8) INSTALLATION & OPERATION

- Installation should only be carried out by a competent person familiar with this type of equipment.
- All suspension points must be assessed to ensure they are adequate to suspend the load.
- A typical Doughty Rail System will be installed at a height such that any failure could be hazardous.
- Before starting the installation, the load for each support should be calculated allowing for the weight of all the track and accessories as well as any curtain whether open or bunched or part bunched as during opening.
- The maximum span between fixings is 1500mm, however, the type of installation must be considered.
- Fixings must be fitted within 250mm of the end of the rail irrespective of the size of the installation.
- When joining rails, a support must be used within 250mm of the joint.
- Doughty Rail can be cut to size on site but care must be taken to remove all sharp edges.



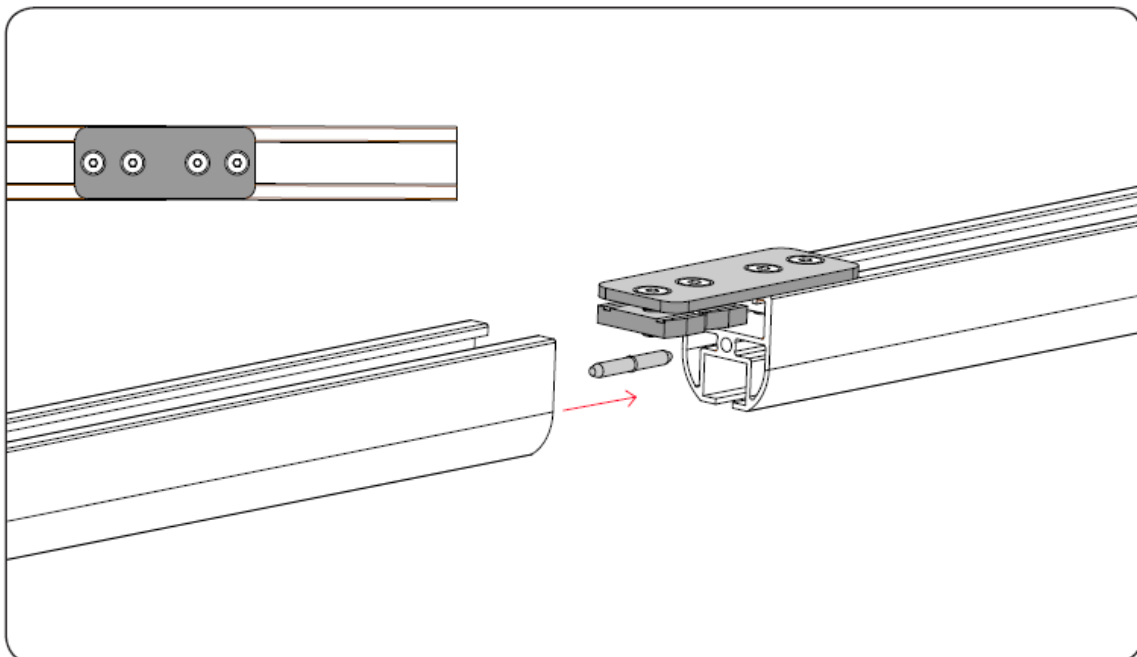
T81190 – Unistrut Nuts

Doughty Rail components are secured in place with standard M6 Unistrut nuts. Unistrut nuts are supplied with each component as required. Other sizes are available, see parts list.



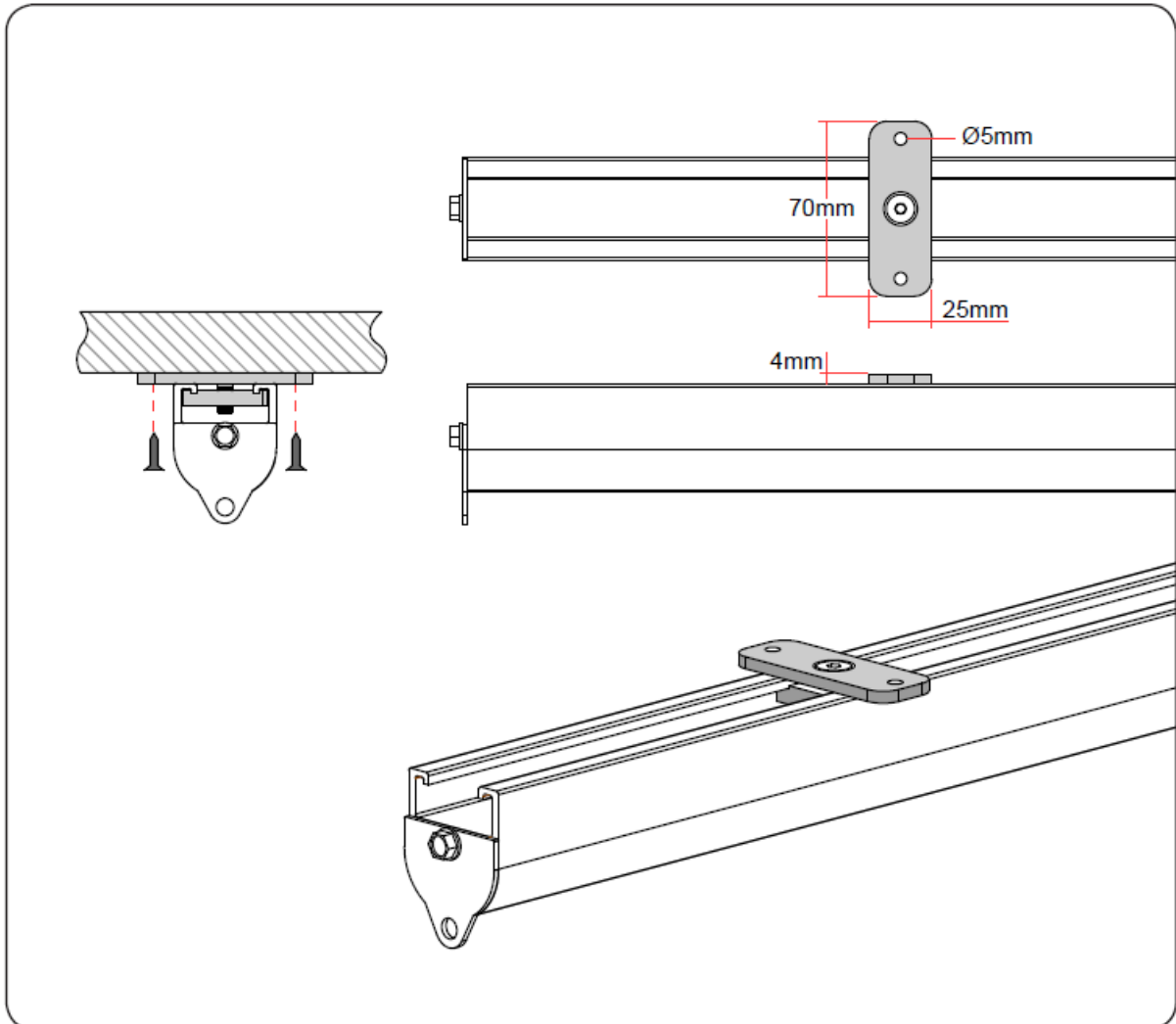
T81100 – Joint Kit

Doughty Rail sections are joined with a Joint Kit. This kit is supplied with a joint alignment pin to ensure the joints are accurately aligned. Joints must be supported.



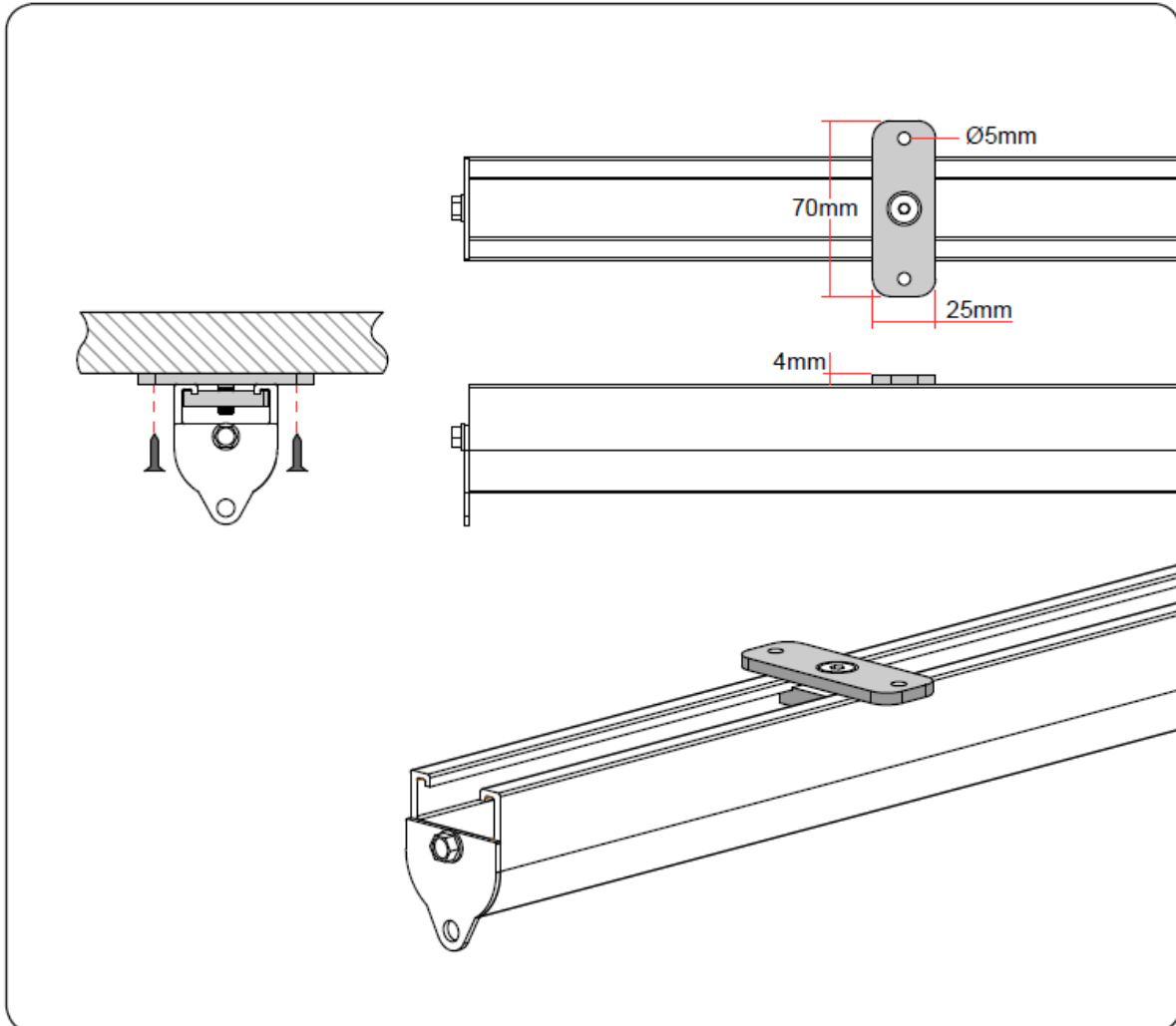
T81110 – Ceiling Bracket – WLL 60Kg

The Doughty Rail Ceiling Bracket is a mild steel bracket powder painted black. The bracket is secured in place with an M6 Unistrut nut. The ceiling mount enables Doughty Rail to be fixed closely to the ceiling virtually eliminating gaps for light to seep in. Fixing holes are 5mm diameter.



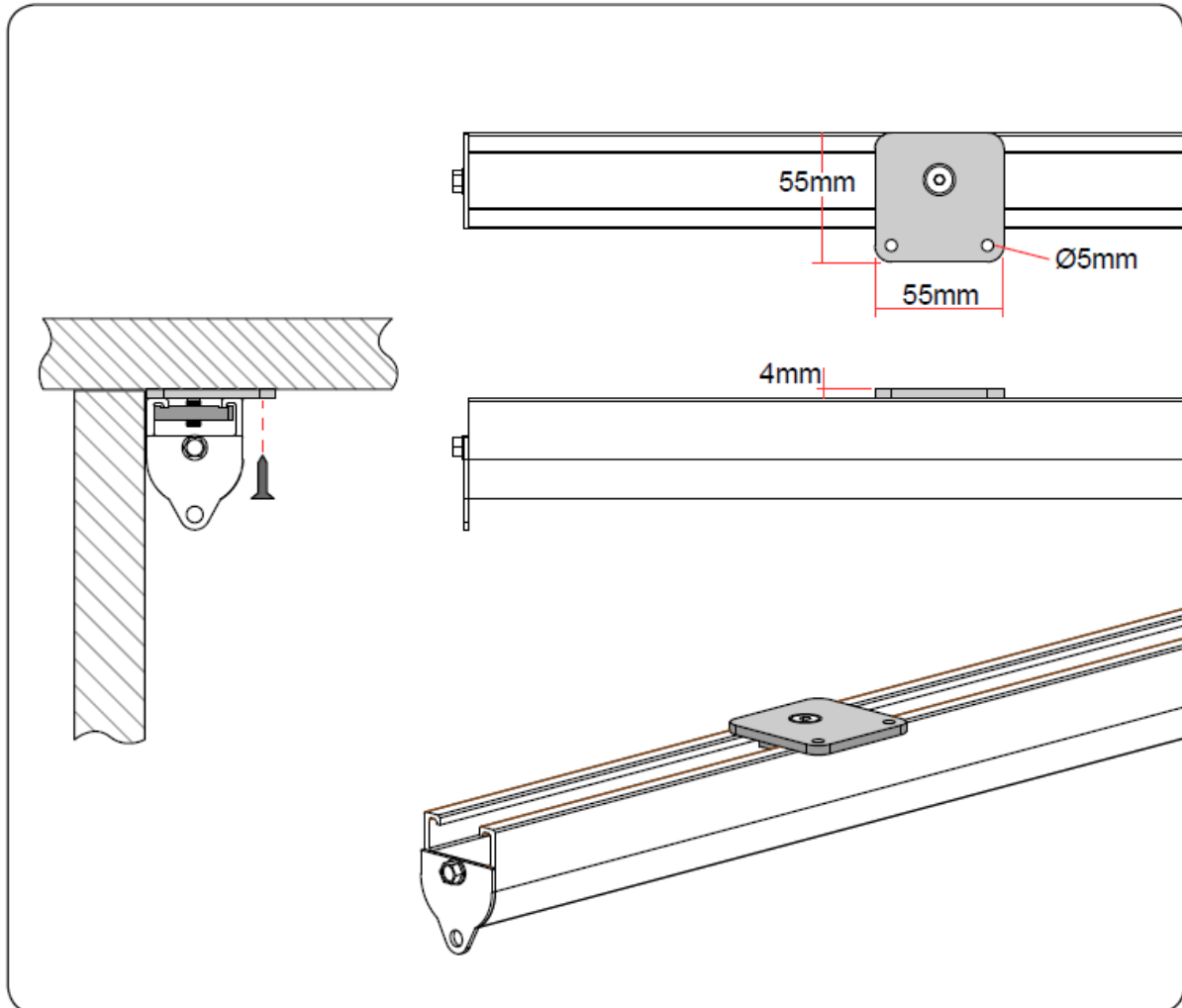
T81120 – Corner Ceiling Bracket – WLL 60Kg.

The Doughty Rail Corner Ceiling Bracket is a mild steel bracket powder painted black. The bracket is secured in place with an M6 Unistrut nut. The ceiling mount enables Doughty Rail to be fixed closely to the ceiling virtually eliminating gaps for light to seep in. Fixing holes are 5mm diameter.



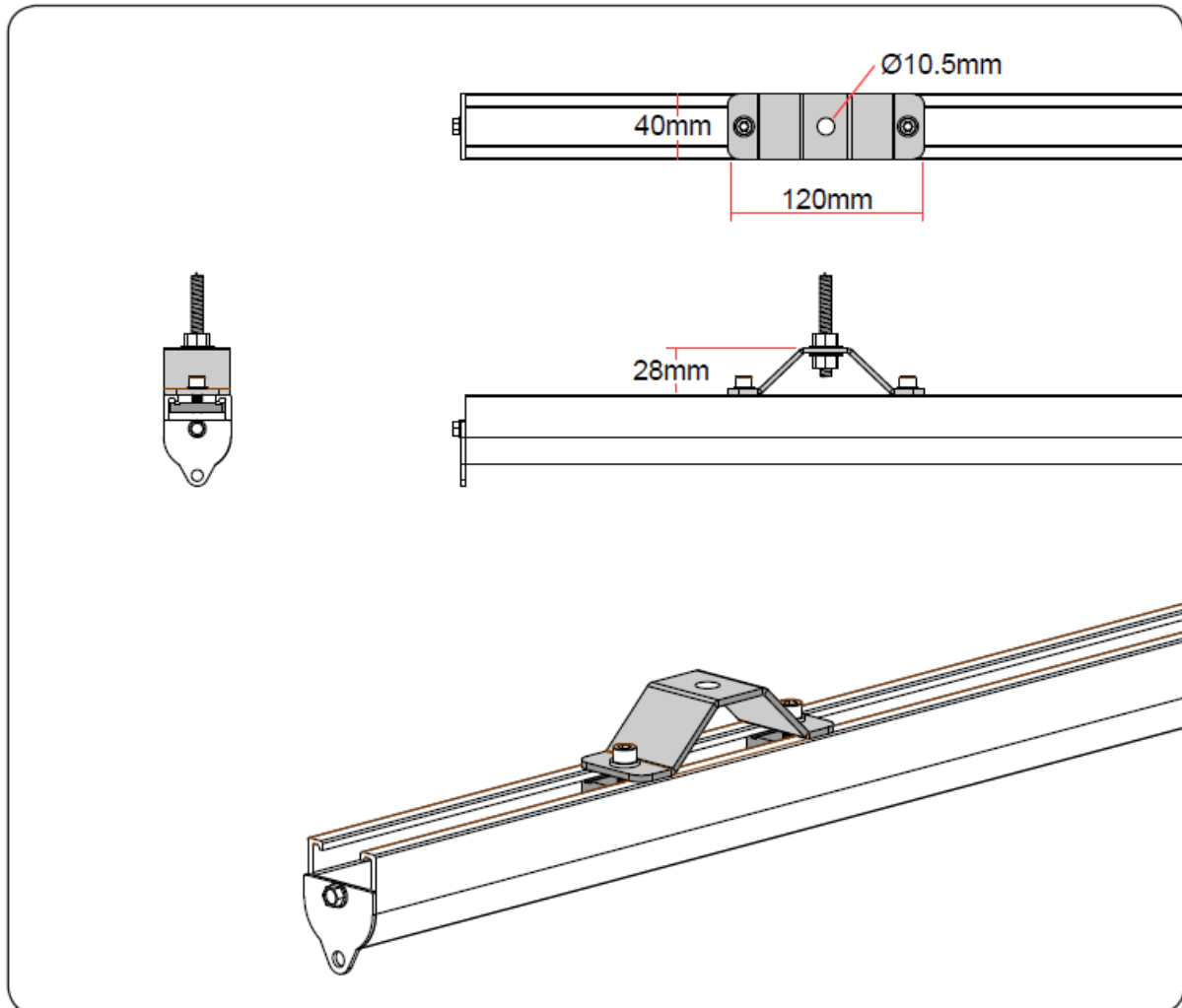
T81170 – Wall Bracket – WLL 60Kg

The Doughty Rail Wall Bracket is a mild steel bracket powder painted black. The bracket is secured in place with an M6 Unistrut nut. The wall bracket enables Doughty rail to be fixed to a wall with two fixings (not supplied). Fixing holes are 5mm diameter.



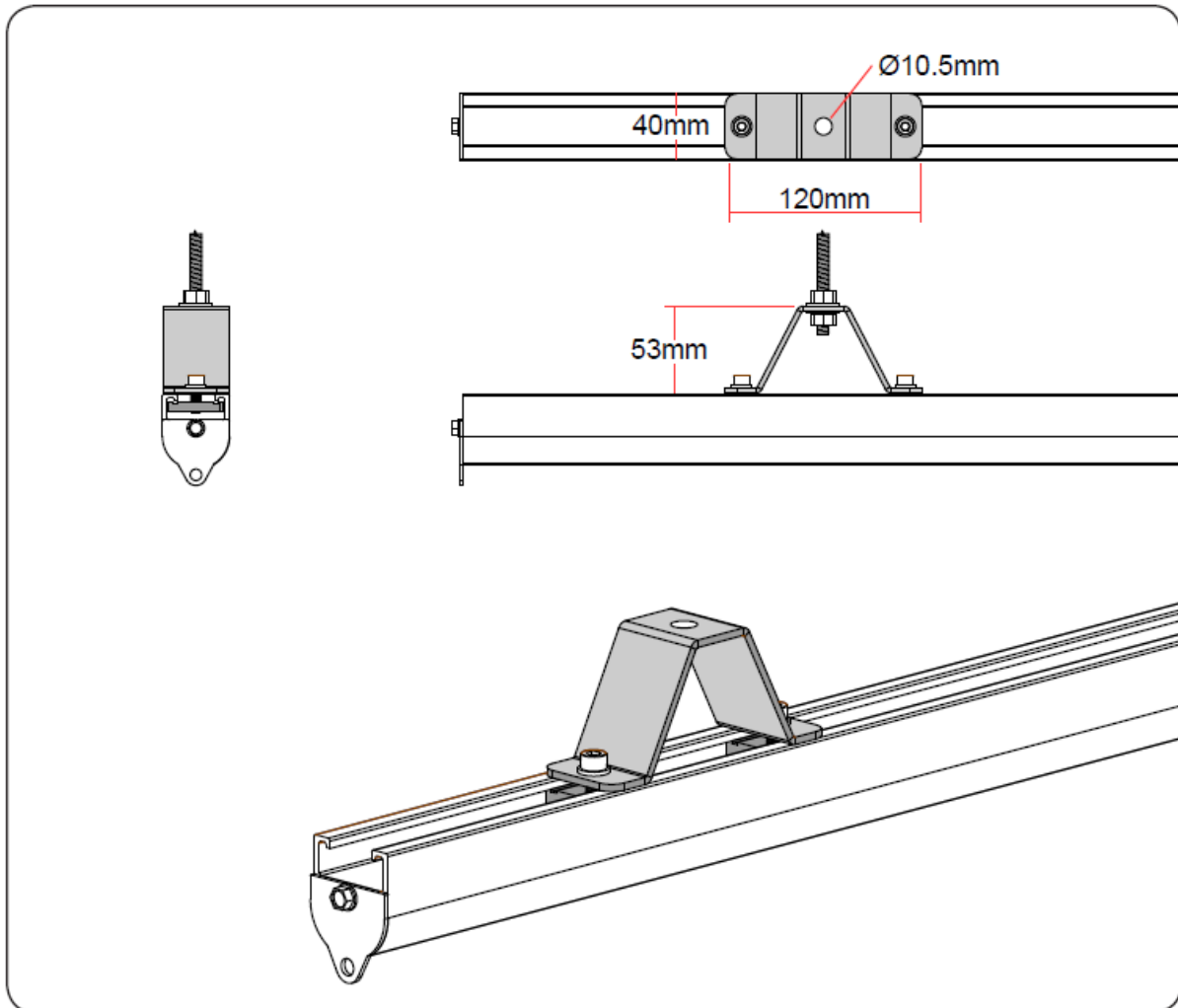
T81140 – 25mm Top Hat – WLL 60Kg

The Doughty Rail 25mm Top Hat Bracket is a mild steel bracket powder painted black. The bracket is secured in place with M6 Unistrut nuts. The ceiling mount enables Doughty Rail to be fixed with an M10 stud giving approximately 15mm of height adjustment.



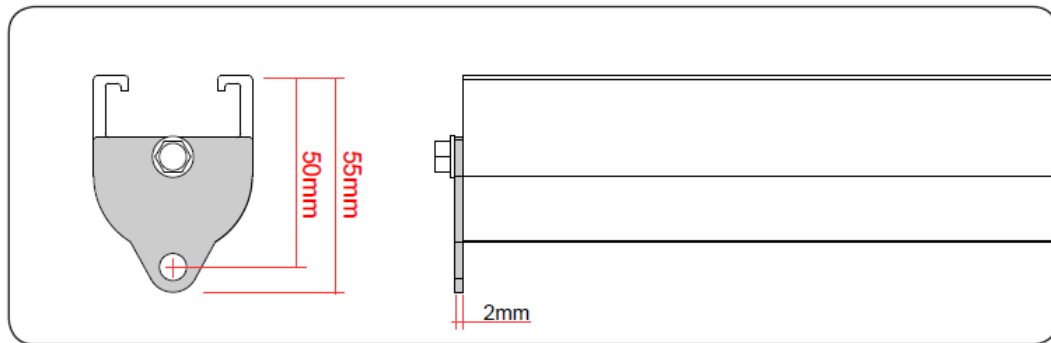
T81150 – 50mm Top Hat – WLL 60Kg

The Doughty Rail 50mm Top Hat Bracket is a mild steel bracket powder painted black. The bracket is secured in place with M6 Unistrut nuts. The ceiling mount enables Doughty Rail to be fixed with an M10 stud giving approximately 40mm of height adjustment.



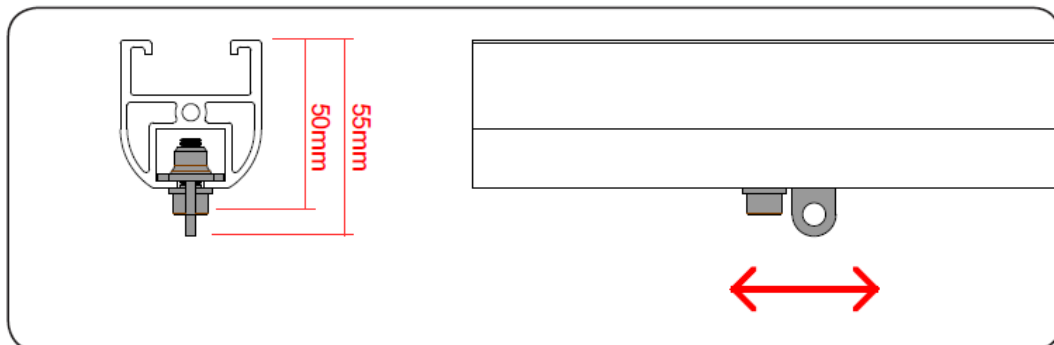
T81160 – End Stop

The Doughty Rail End Stop is a mild steel bracket powder painted black. This end stop is secured in place with a self tapping screw (included). The end stop provides a fixed hole for the curtain to be attached.



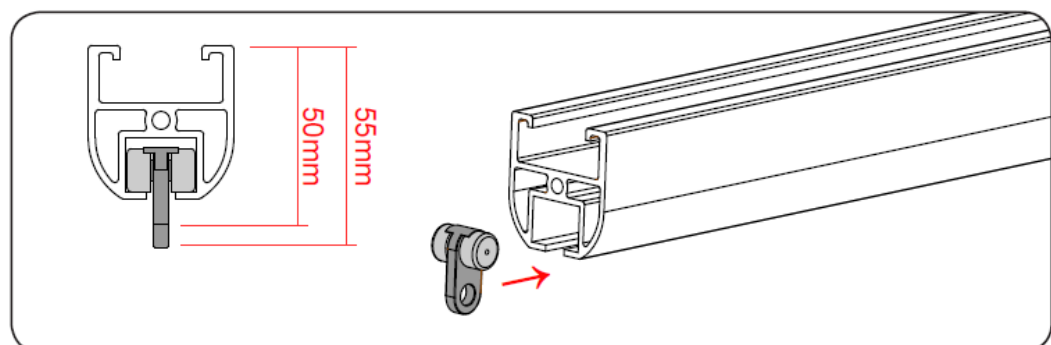
T81161 – Slide In End Stop

The Doughty Rail Slide In End Stop is a mild steel bracket powder painted black. Secured in place with an allen key, this end stop enables a fixed eye to be positioned anywhere along the rail.



T81200 – Ball Raced Runner – WLL 6Kg

The Doughty Rail ball raced runners are a moulded plastic component. The runner has a WLL of 6Kg and it is recommended these runners are at 300mm intervals throughout the span of the curtain/drape.



Operation.

To close the curtain, hold the curtain and walk away from the end stop without applying a downward force. The curtain will move along the rail on the pre-fitted ball raced runners. To open the curtain, hold the curtain and walk it back towards the rail end.

Please note: if the curtain does not move freely along the Doughty Rail then the installation needs checking for worn parts, damage or debris before use.

DO NOT USE EXCESSIVE FORCE TO MOVE THE CURTAIN ALONG THE RAIL.

Do not apply a downward force to the curtain as this could cause damage to the track, it's accessories or the fixings, which could lead to failure of the equipment or installation.

9) COMMISSIONING

Upon installation record the following:

- Type of Doughty Rail.
- Place and date installed.
- Name and title of installer and organisation.

10) MAINTENANCE & INSPECTION

Maintenance must only be carried out by approved personnel.

Approved personnel must make regular checks of the product.

If any damage is seen, including cracks, deformation or missing parts, the product must be removed from service and returned to an Approved Service Agent for evaluation/repair.

A full list of approved service agents can be found at www.doughty-engineering.co.uk.

Approved personnel must carry out a visual inspection and a functional test before every use.

Approved personnel must carry out more detailed inspection and testing of the product on a regular basis depending on the usage of the product.

Written records should be kept from the date the product is put into operation.

RECORDS

An inspection table can be found below where the maintenance and inspection history of the Doughty Rail can be recorded.



The installer/operator must read and understand the instruction manual before using the equipment. Operators should be adequately instructed and fully understand the safe use of the equipment before use.

Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard could render the equipment unsafe and the manufacturer cannot accept any responsibility in this respect.

Do not use this equipment for a purpose that it is not intended.

Retain this manual for future reference.

11) IF THE PRODUCT IS NO LONGER NEEDED

Products that are no longer needed can be scrapped. Preferably remove all and aluminium steel parts, store part separately before offering them to a scrapping company.

The following alloys are used:

- Mild Steel 8.8
- Aluminium alloy 6082 T6

12) WARRANTY

- For a period of 12 months we undertake to repair, free of charge any damage attributable to faulty materials or workmanship, provided that the appliance is forwarded, freight paid, to our works or one of the Doughty appointed service agents.
- The guarantee-period begins on the day of the delivery, proven by a purchase receipt like an invoice or delivery note or their copies.
- The guarantee only is applicable for new equipment.
- The guarantee does not cover damage due to transport damage, negligent handling, overload or parts subject to normal wear and tear. Nor damages that originate from a case of misuse because of non-observance the instructions in this manual.
- The fitting of non-original replacement parts or modifications of design by third parties invalidates the guarantee.
- Guarantee repairs do not renew nor extend the guarantee-period.
- In case of a claim under the guarantee or spare part requirements please contact your Doughty service agent.
- The manufacturer is not liable for indirect consequential damage or financial loss.
- The manufacturer is not liable for any changes made to the Doughty Rail or for any damage resulting from such changes.

13) INSTALLATION / INSPECTION REPORT

Installation

Part No.....	Serial No.....
Customer.....	Location.....
Installation Company.....	
Installed By.....	

Inspection

INSPECTED BY	DATE	ESTIMATED OPERATIONS	NOTES	SIGNATURE

14) EC DECLARATION



EC-DECLARATION OF CONFORMITY

According to the Machinery Directive 2006/42/EEC Annex II

Doughty Engineering Ltd

Crow Arch Lane
Ringwood
Hampshire
BH24 1NZ

Herewith declares that:

Doughty Rail, T81000 ,T81010 ,T81020 ,T81001 ,T81011 ,T81021 ,T81050 ,T81060,
T81070 , T81080 ,T81051 ,T81061 ,T81071 ,T81081.

are in compliance with the following harmonized standards/standards/regulations

Machinery Directive 2006/42/EEC annex II

BS7905-1:2001 Lifting equipment for performance, broadcast and similar applications

DGUV 17 Safety at production & events for television, radio, film, theatre, exhibitions and loads above persons

Signed for and behalf of **Doughty Engineering Ltd**

Name **Stuart Rodgers** Date 25/10/2019

A handwritten signature in blue ink, appearing to read "Stuart Rodgers", is written over a light blue circular stamp.

Position **General Manager** being the person responsible appointed by the manufacturer.

Company Registration No. London 972614
Registered Office: Crow Arch Lane, Ringwood, Hants, BH24 1NZ
Directors: M.B. Lister. J.C.G. Chiverton. S.C. Wright