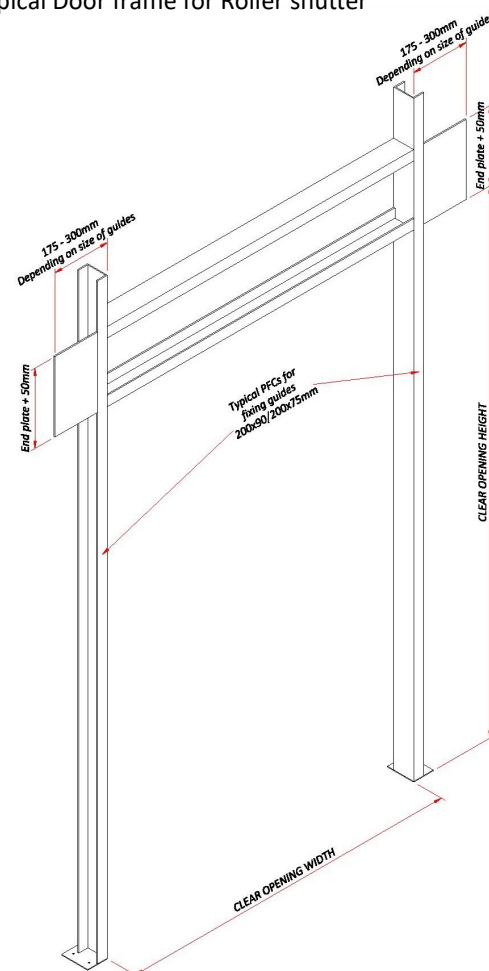


DATA SHEET 207



Finish	Pre finished acrylic or powder coat either or both sides
Standards & Quality	Compliant with BS EN 12453 & 12604 & manufactured and installed to ISO 9001/2015 and is CE marked and UKCA.
Door Curtain	Constructed from 95mm or 100mm profiles
optional	Galvanised steel sections and retained at ends by end locks and an acoustic value reduction of 18db across the lath section.
Bottom Rail	Fitted with a purpose-designed extrusion complete with interlocking (EPDM) rubber .
Door Guides	Continuous steel angle bolted to the door jamb supporting a deep guide channel. The channel has nylon seals down internal edges of the guide mouth. Guides are pre-galvanised prior to rolling and can be optionally powder coated at extra cost to match the door colour.
End Plates	With steel angle fixing to door frame. The end plates support the weight of the shutter and are fixed through the angles.
Roller	Hollow tube of adequate diameter to minimise deflection supported on steel axles and roller Barings
Seal at Head	A brush seal is provided at the door clear opening height and fixed to the lintel.
Hoods	Supplied as an option in 0.9mm pre-galvanised sheet steel, folded around the end plate assemblies to form a three sided enclosure and fixed directly to the door support frame through a flange provided along its top edge . The sections will be joined with a vertical joggle connection. The hood may be powder coated, at extra cost, to match the door colour.



Insulated roller shutters, externally mounted in powder coat finish with matching roller and motor hoods

The insulated door curtain is available in 100mm and the lighter 95mm profile, in steel, stainless steel or aluminium. Steel is galvanised and optionally plastisol pre-coated in standard colours or, powder coated covering a wide range of options to suit required environments. Listed are some of the options available, if nothing meets your specification ask! We do lots of specials.

Roller shutter doors are UK designed and manufactured, backed by Hart's over 70 years' experience in roller shutter door systems. The 100mm heavy duty construction is suitable for all door openings and will efficiently deliver performance for many years. The 95mm lighter profile is more suitable for doors up to 6M wide and with high speed and automated features. Roller shutters comply with all required British Standards and Health & Safety requirements.

Insulated roller shutter profile options

Standards:
Roller shutters are designed to comply with the British and EEC safety regulations for power operated machinery. Available up to 10M x 10M. Specification can be varied to meet operational requirements. Compliant with EN 13241-1:2003 etc. Manufactured & installed to ISO9001/2015 UKCA mark.

Operation: Electrically operated via locally located push buttons (hold to run) or automatically activated by sensors all located to maximise efficiency and compliant to safety in use regulations. Emergency override in hand crank or ground floor hand chain

Bottom Rail:
Incorporates rubber seal. (Note: There must be a fall of the door threshold to the outside as this seal is not sufficient to prevent wind blown water penetration without a step or proprietary drainage system). Class O.

Door Guides & Wind Resistance
Standard door is wind class standard 2 optional wind guides to class 5. Increasing levels of wind resistance are available and prototype tested in-house to max 5000 pascals. Guide depth options, size dependant 50mm, 63W, 75, & 100w. All as appropriate to the door size and wind resistance requirements.

End Plates Roller Supports:
Steel profile end plate with steel angle fixing to door frame structure. The end plates support the weight of the door and are fixed through the angles to the structure.

Roller box, Motor covers and infills:
Optionally provided as weather or dust cover for the roller and separately the motor this can be upgraded with heaters and insulation for high humidity or low temperature environments. Supporting frames and Infills for doors in combination with other doors or fixing to non flat surfaces designed as appropriate. Optionally galvanised steel, powder coated or stainless steel.

Finish:
Standard mill finish All can be powder coated (max 8m). or prefinished to standard colours. The door curtain guides and bottom rail hoods, all exposed parts available in matching powder coat. Non galvanised surfaces such as heavy support angles, additional frames and tube will normally be finished in black undercoat unless specified other.



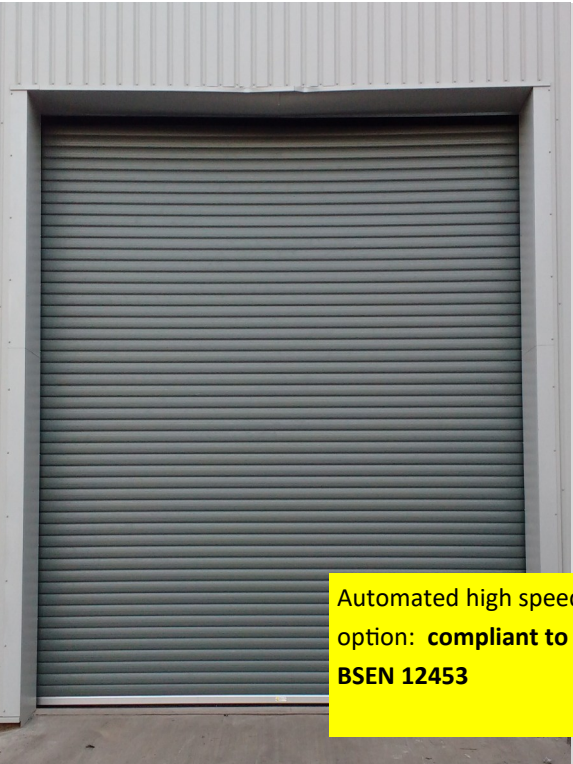
Door Curtains: Insulated door profiles are available from ultra light weight to heavy duty designs, selection is on the basis of intended use, environment, wind resistance and the dimensions required. Most popular:

Profile: 100
This twin steel interlocking rolled profile, available in three material thickness making it the most versatile in that in heavy duty format has extremely high wind resistance and has been tested to 5000 pascals, with a U factor 4.3 w/m2K. over the entire door.

Finish: Galvanised or stainless steel requires no finish, available pre finished in standard plastisol colours (no max width)or powder coat up to max 8M wide.

Dimensions:
Max normal width is 10M with class 5 wind resistance as standard.

Available with vision slots with polycarb windows located as required



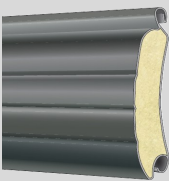
Automated high speed option: compliant to BSEN 12453

Profile: 95
Steel profile convex faced available in galvanised or pre finished in standard colours with polyurethane injection infill interlocking sections, with a U factor 3.629 w/m2K over the entire door. Curtain retained at end by endlocks. Bottom rail incorporates a rubber profile to contact the finished floor.

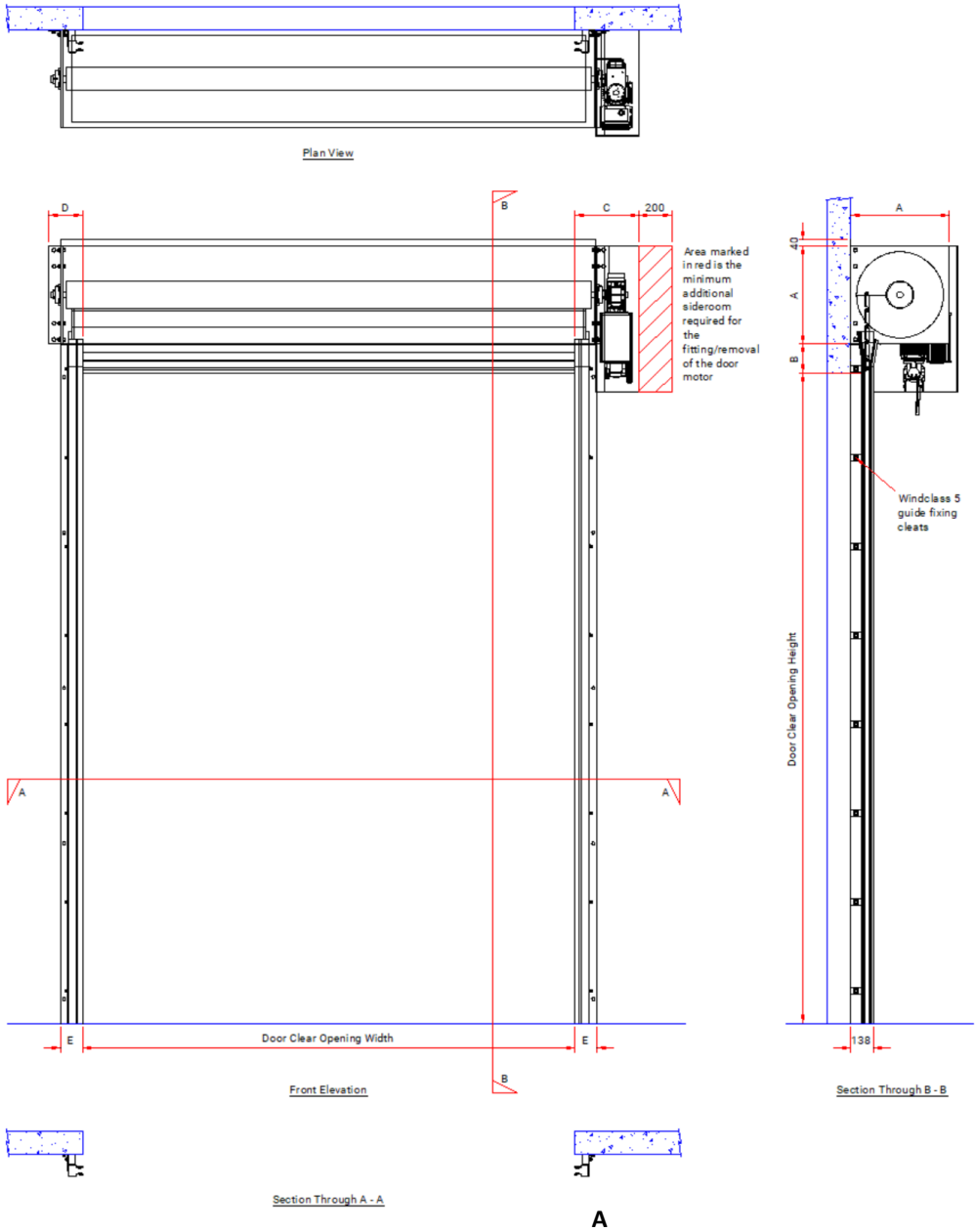
Finish:
Prefinished in standard colours or powder coat.

Dimensions:
Normal Max 6M wide and 6M high up to class 5 wind resistance.

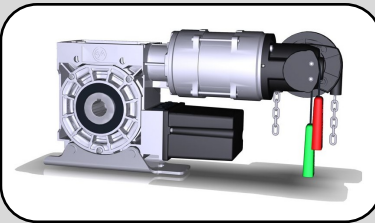
Available with vision slots with polycarb windows located as required



Typical General Layout Drawing



Motor Direct Drive:
Safedrive direct drive geared motor unit include digital limits, limit overrun protection. High precision worm gearbox incorporating safety brake (negates the necessity for auxiliary safety brake). Crank handle, emergency operation optionally with ground floor hand chain, IP 65, remote signalling, and speed options



Motor Chain Drive:
Where side room is at a premium, or very large doors required, a flange mounted chain driven motor and safety brake is available, reducing the side room and potential access requirements. This is fitted in combination with a safety anti-fall brake mounted at the other end of the roller.



SPEED:
Available in variable speed drive to provide high speed operation

Power supply:
Both Single or 3 phase available dependant on door size, frequency and speed operation.

OPERATION:
Control Panel options:
State of the art digital panels with increasing functionality across the range. Optionally Press button and or automatic operation. Plug-in & pre wired, ground floor limit adjustment, 24 volt safety systems in a IP65 box, control system with integral digital display of status. A host of readily available software options and panel upgrades for door interface, air locks including traffic lights and signalling confirmation with spare terminals. Connected to mains via plug to power socket provided by others.



Pictured panel 971, inc optional lock off Estop.

Standard sideroom allowances refer to job drawings provided fto verify dims

Profile 100					
Clear Opening Sizes	A	B	C	D	E
Up to 4m x 4m	500mm	100mm (Standard)/180mm (Safe Edge)	412mm	244mm	89mm (Inboard Fix)/134mm (Outboard Fix)
Up to 5m x 4.5m	550mm	100mm (Standard)/180mm (Safe Edge)	414mm	246mm	89mm (Inboard Fix)/134mm (Outboard Fix)
Up to 5m x 6m	600mm	100mm (Standard)/180mm (Safe Edge)	425mm	246mm	89mm (Inboard Fix)/134mm (Outboard Fix)
5m+ x 6m+	650mm+	100mm (Standard)/180mm (Safe Edge)	425mm+	246mm+	89mm (Inboard Fix)/134mm (Outboard Fix)

Profile 95					
Clear Opening Sizes	A	B	C	D	E
Up to 2.5m x 2.5m	406mm	100mm (Standard)/180mm (Safe Edge)	382mm	224mm	89mm (Inboard Fix)/134mm (Outboard Fix)
Up to 4m x 4m	456mm	100mm (Standard)/180mm (Safe Edge)	382mm	224mm	89mm (Inboard Fix)/134mm (Outboard Fix)
Up to 5m x 5m	500mm	100mm (Standard)/180mm (Safe Edge)	382mm	224mm	89mm (Inboard Fix)/134mm (Outboard Fix)
5.5m+ x 5.5m+	550mm+	100mm (Standard)/180mm (Safe Edge)	412mm	244mm	89mm (Inboard Fix)/134mm (Outboard Fix)

Visit www.hartdoors.com to see our full range of products

