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

Roller shutters are the most versatile of door systems . They can be fitted virtually anywhere, at sizes up to 10M x 10M, in a host of variable specifications from bog standard to state of the art, fire, security compliant and including extreme wind resistance with a model tested to 5000 pascals.

The door curtain is available in insulated or non insulated steel, stainless steel or aluminium profiles, optionally galvanised, powder coated or pre-finished coatings 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 heavy duty construction is suitable for all door openings and will efficiently deliver performance for many years. Roller shutters comply with all required British Standards and Health & Safety requirements.

## **Features and Appearance** Fin

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.

Typical Door frame for Roller shutter

**Door Curtain** Constructed from 95mm or 100mm profiles Galvanised steel sections and retained at ends by end locks and an acoustic value reduction optional of 18db across the lath section on the 100mm lath and 22db on the 95mm lath.

Fitted with a purpose-designed extrusion complete with interlocking (EPDM) rubber . **Bottom Rail 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

Seal at Head 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.

A brush seal is provided at the door clear opening height and fixed to the lintel.



# Hart Door Systems Limited Redburn Road

Westerhope Industrial Estate Newcastle upon Tyne NE5 1PJ







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### Insulated roller shutter profile options

### 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

Standard Tee section with optional 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 Ö.

#### **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

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

Optionally galvanised steel, powder coated or stainless steel.

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



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.

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.

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

Available with vision slots with perspex windows located as





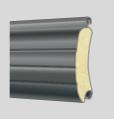
### Profile: 95

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.

Prefinished in standard colours

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

Available with vision slots with perspex windows located as required.



# MADE IN **BRITAIN**





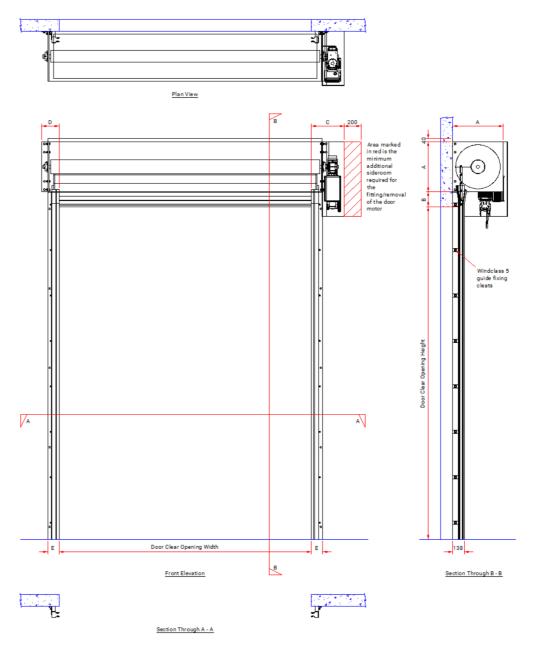








### **Typical General Layout Drawing**



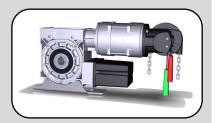
Standard sideroom allowances refer to job specific drawings provided fto verify dimensions

Profile 100							
Clear Opening Sizes	Α	В	С	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	Α	В	С	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)		

#### **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



#### Motor Chain Drive:

Where side room is at a premium, or very large doors

flange mounted chain and safety brake is available reducing the side room and potentia access requirements. This is fitted tion with a safety anti-



mounted at the other end of the roller

### All compliant to BSEN 12453

Power supply:
Both Single or 3 phase available dependant on door size, frequency and speed 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 adjust-ment, 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 lights and signalling confirmation with spare terminals. Connected to mains via plug to power socket provided by oth-



inc optional lock off Estop .

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