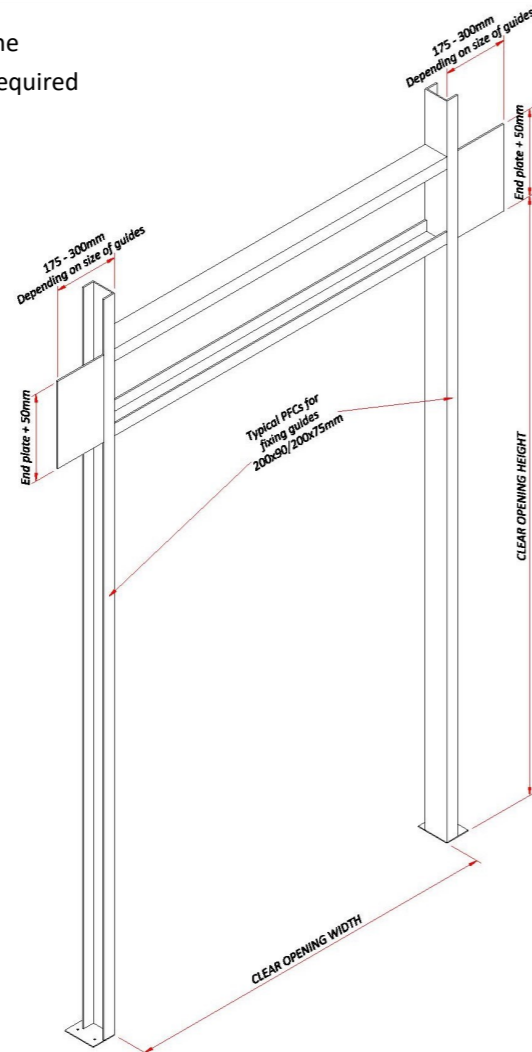


Typical Door support frame
upgraded to carry loads required



Features, Appearance and Performance

Curtain	Twin steel or stainless steel heavy duty interlocking ribbed face 100mm profile.	Speed of operation	Approximately 100-150mm per second. Maximum 6 operations per hour upgraded performance on request.
Guide	Reinforced heavy duty wind lock side channel assembly complete with double brush seals between profile and the guide. All supported on reinforced steel sections designed for attack resistance.	Locking	Manually operated shoot bolts or electromechanical shoot bolts press button, key switch or automatically operated.
Seals	Horizontal brush seal at clear opening height and Double brush seals on side guides providing smooth quiet operation.	Control Panel	Standard or multifunction control panel for interface to other equipment as required.
Finish	Galvanised as standard with option plastisol finish in standard colours or powder coated in a range of RAL colours.	Size Range	0.5m to 9m wide 1m to 9m high. Large doors to be checked for overall sq.m limits.
Wind Resistance	SR3 has minimum resistance to EN 12424 Wind Class 5. optionally enhanced to meet minimum pressure resistance of 3,000 pascals. SR4 is not wind tested.	Operators	Full range from hold to run PB's to fully automated systems with full safety Backup.

LPS 1175: SR3 & SR4 RATED ROLLER SHUTTERS



Attack resistant to LPS1175 SR3 and SR4 electrically operated steel roller shutter

Roller shutters are the most versatile of door systems. This door is designed in response to increasing levels of threat to persons & property providing a measurable and escalating resistant obstacle to burglary, vandalism and terrorism. Available made to measure from 500mm to 9M wide, and 1m to 9M high, third party certified to LPS1175: SR1, 2,3. & SR4 Available with manual or electrically operated.

The door curtain is available in Steel or stainless steel profiles, insulated (SR3) or non insulated (SR4), galvanised, and optionally pre-finished plastisol coatings, or powder coat. Matching colour enclosures and flashings compliment the appearance.

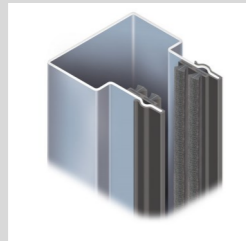
Roller shutter doors are UK designed and manufactured, backed by Hart's over 70 years' experience in roller shutter door systems. The heavy duty construction is suitable for all door openings and will efficiently deliver performance for many years. Roller shutters comply with all required British & European standards and Health & Safety requirements.

Standards: Hart High security Roller shutters are designed to comply with the British and EC safety regulations for power operated machinery. Available up to 9M x 9M. and specifically the LPS1175 SR3 & SR4. Compliant with EN 13241-1: Manufactured & installed to ISO9001/2015 & CE marked.

Operation: Electrically operated via push buttons (hold to run) minimum 1M distant from the door, 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.

Door Guides & Wind Resistance

The side guides are fabricated in steel sections with internal gusseted webs in a fully welded construction incorporating a rolled steel wind guide with seals for noise reduction. All securely bolted to the building structure, minimum class 5 wind resistance, optional enhanced levels if required.



End Plate 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.

Bottom Rail: Steel Channel and angle sections combining rubber seal, extremely strong & rigid to resist attack without additional locking at mid point. (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.

Roller box, Motor covers and infills: Optionally provided as weather or dust cover for the roller, with a separate cover for the motor unit. This can be upgraded with heaters and insulation for hostile environments.

LPS 1175 SR3 Profile: 100mm

The door profile is constructed by a twin steel interlocking rolled profile which forms a box construction, retained at adjoining ends within fabricated heavy duty guides.

To attain compliance to this standard the door has been subjected to multiple methods of attack when fully closed & locked, utilising any of the methods of locking. Each attack extends to max 5 minutes of working time on each specific method of attack allowing 20 minutes overall utilising tool category A, B & C. The standard originates from the British research establishment and complies to insurance, secured by design and police preferred standards.

LPS 1175 SR4 Profile: 100mm

In addition to the above the door curtain profile is reinforced internally by solid aluminium extrusion this enhances the attack performance allowing tool categories A-D and 10 minutes working time and 30 minutes overall attack time. This makes the door curtain extremely rigid on small doors.

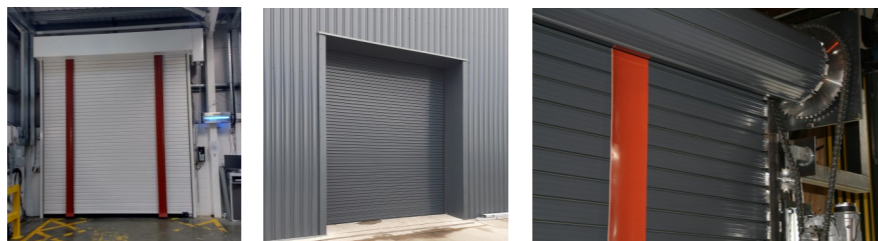
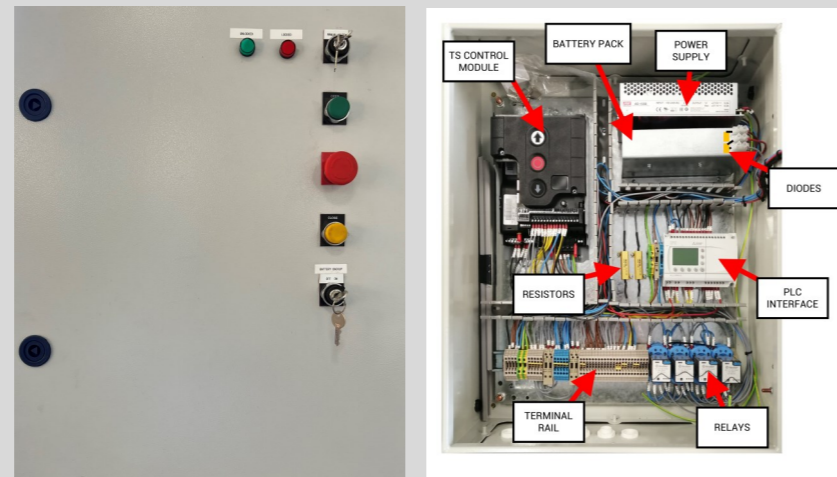
Finish: Galvanised or stainless steel requires no finish, upgrade available to pre finished in standard plastisol colours (no max width) or powder coat up to max 7.5M. Non galvanised surfaces such as heavy support angles, additional frames and tube will normally be finished in black undercoat unless or if higher specification is required can be galvanised after manufacture or powder coated, rubber strips are used to protect the profile rubbing against each other when painted.

Dimensions:

Max normal width is 9M. Note, doors will flex under wind pressure.

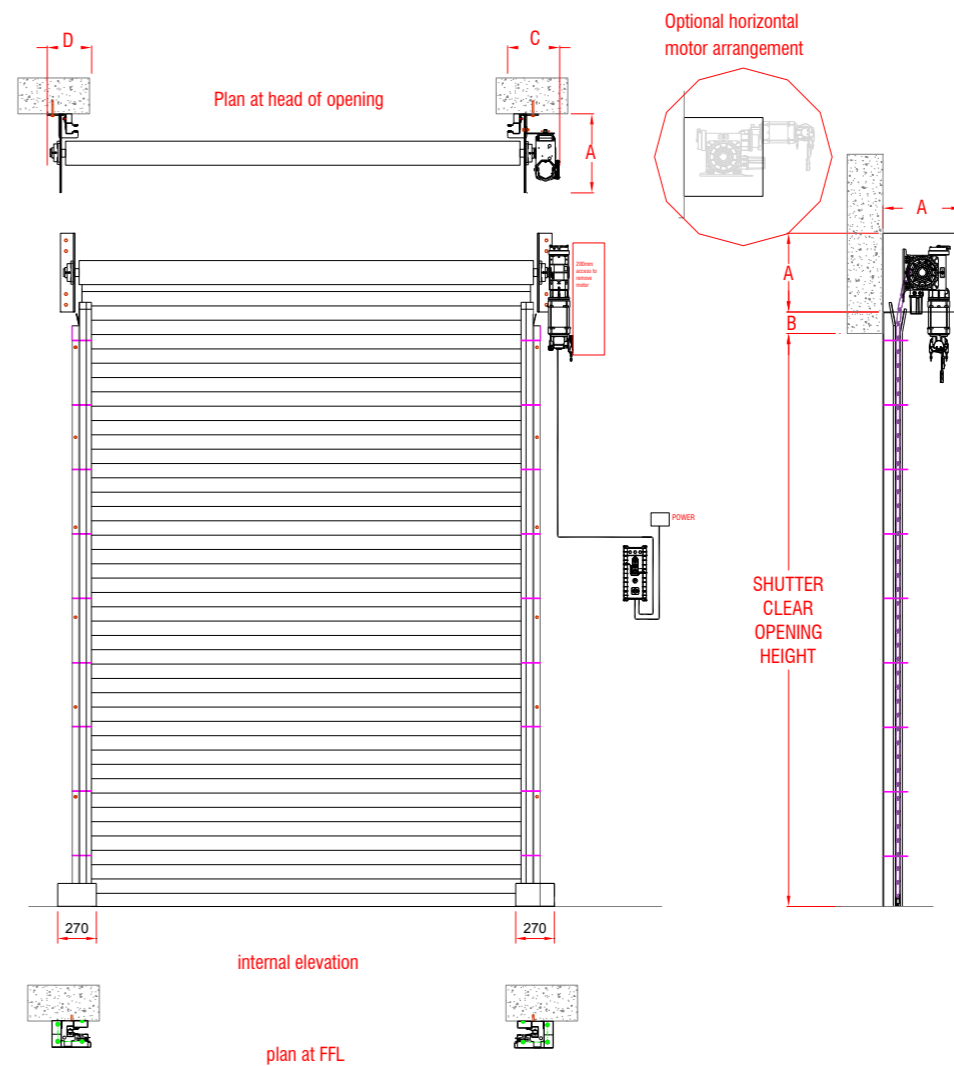
Locking:

Manually operated pin locks projecting through the profile and side guides form the most economic method of locking. They are interlocked to the control panel when not in use, ensuring prevention of activation with locks engaged. Alternatively electro-mechanical actuators operate slip locks may engaged by press button or fully automated with the door closing and opening function via **Multiple function control panel** designed to specific requirements, including Lock status indicated on the face of the panel.



Typical General Layout Drawing

Structural opening substrate must be suitably reinforced brickwork/concrete/steelwork as detailed in the standard LPS1175 Issue 7 Page 17. "It is assumed that the substrate onto which the product is fitted provides a resistance to attack at least equivalent to that afforded by the product itself. Door mounted to internal building face"

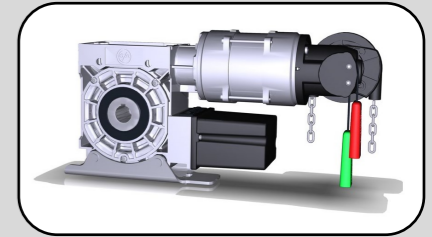


Profile 100					
Clear Opening Sizes	A	B	C	D	E
Up to 4m x 4m	500mm	180mm (Safe Edge)	492	244 +	217 & 271 with electric locks
Up to 5m x 4.5m	550mm	180mm (Safe Edge)	496	246 +	217 & 271 with electric locks
Up to 5m x 6m	600mm	180mm (Safe Edge)	505	260 +	217 & 271 with electric locks
5m+ x 6m+	650mm+	180mm (Safe Edge)	505	260 +	217 & 271 with electric locks

Standard sideroom allowances refer to job drawings provided to verify dimensions

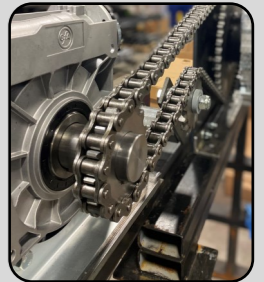
Motor Direct Drive:

Safedrive direct drive geared motor unit including 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 separate safety brake is available, reducing the side room and potential Access requirements. The safety, anti-fall brake mounted at the adjoining end of the roller.



Both 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 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. Connected to mains via plug to power socket provided by others.



Pictured panel 971, inc optional lock off Estop.



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