

# Typhoon Roller Shutter

270  
3kPa

271  
4kPa

**HART**  
DOOR SYSTEMS



This shutter is designed to comply with the current British and EEC safety regulations. Optional specification levels can be varied to meet any special operational requirements.

#### Standards & Quality:

Compliant with prEN 13241-1:2003 & manufactured and installed to ISO 9001/2001 and is CE marked.

#### Door Curtain:

Constructed from 85 x 25 double skin interlocking galvanised steel sections and retained at ends by a mix of nylon and steel wind end locks. The door curtain is made up from an insulated lath section giving a thermal insulation value of 0.69w/m.sq.k across the lath section and an acoustic value reduction of 18db across the lath section.

#### Bottom Rail:

Fitted with a purpose-designed extrusion complete with interlocking (EPDM) rubber weatherseal.

#### Door Guides:

Continuous steel angle bolted to the door jamb supporting an 88mm deep guide channel. The channel has nylon seals down internal edges of the guide mouth. Guides are pre-galvanized prior to rolling and can be optionally powder coated at extra cost to match the door colour. The channels are re-enforced with steel plates to allow the door channel to transfer the 3kPa / 4kPa wind loading from the door curtain back to the supporting structure.

#### End Plates:

Circa 500mm square shutter steel end plate with steel angle fixing to door frame. The end plates support the weight of the shutter and are fixed through the angles to the supporting structure.

#### Roller:

A steel tube adequate to prevent deflection of less than 400:1 along its length with welded steel supporting axles on self-aligning ball bearings, non counterbalanced i.e. no springs. The assembly will be primer painted with exception of the axles which will be wax coated.

#### Seal at Head:

A brush seal can be provided as an option across the head of the door to close the opening from outside.

#### Hoods:

Supplied as an option in 0.9mm pre-galvanized 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.

#### Power Supply:

The 3 phase, neutral and earth, 16amp 380/440V AC, 50hz power supply will terminate in a Euro 5 pin industrial socket within 1 meter of the door control panel on the motor side at approximately 1.5M above floor level. The press button controls will be mounted at approximately 1.2M above floor level. The wiring connections between the control panel and the motor will be in braided cable with plug and sockets arrangements to allow for easy site installation. The cable will then be surface clipped.

#### Drive System:

The Safedrive unit has been specially developed for roller shutter doors which are non-spring counter balanced. The drive is provided by hollow shaft keyed drive through the door axle. It has been designed for a long service life and has a built in safety brake device which conforms to all current BSEN industrial and commercial safety standards. The unit also has a built in limit switch.

#### Manual Override:

All doors are supplied as standard with a Ground Floor Hand Chain Operation with floor level engagement, or crank handle operation at the motor, for emergency operation. (Note: this is heavy and slow to operate)

#### Control Panel:

The IP 65 enclosure incorporates open, close and stop buttons with the provision for installing a key switch and/or latching stop button if required. It houses a digital control system which allows for limit switch setting from ground level, has a programmable door maintenance indicator, load monitoring in the open direction, digital display of door status and/or fault diagnosis, and meets the requirements of BS EN 12453.

**Normal Operation:** Press buttons in full view of door. Impulse open and "hold to run" close. Options include key switch. To operate by momentary pressure in the closing direction, safety systems need to be included.

#### Safety:

As standard, fitted with either an integral motor safety brake or an auxiliary safety brake, depending on motor choice. Optional optical safe edge on the bottom rail, photo cell protection, warning signs, and increased protection levels as required.

#### Operating Speed:

The standard travel speed is circa 100-200mm/sec depending on door size and weight

#### Wind resistance:

Resistance to EN 12424 Wind Class 5. Enhanced design to meet minimum pressure resistance of 3,000 Pa / 4,000 Pa

#### Optional Automatic Operation:

Full automatic operation via control panel by remote induction loop, radio control, with full safety systems.

#### Finishes:

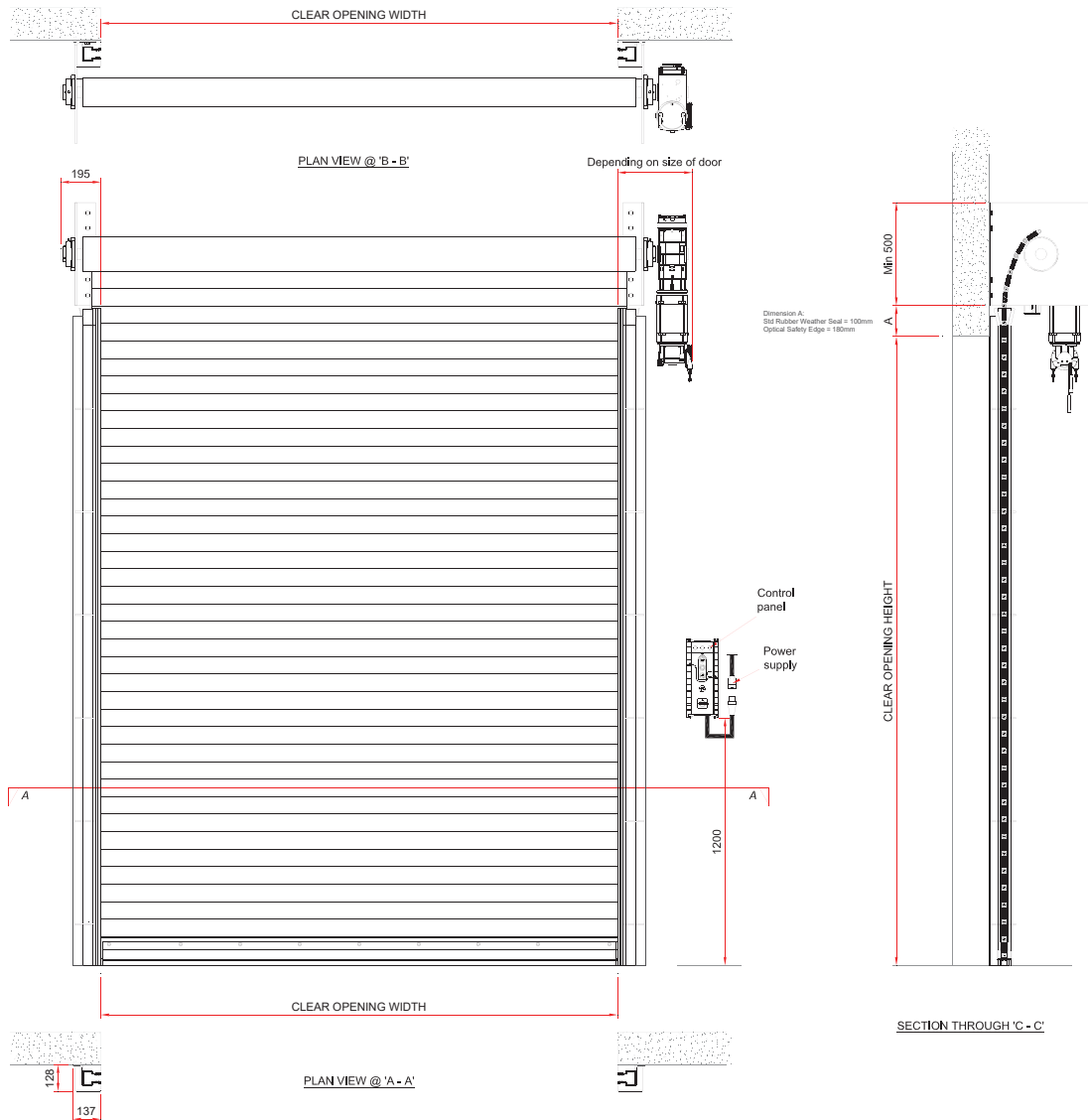
Galvanised steel as standard with options for Plastisol or RAL powder coated finish to one or both sides of the curtain.



Standard Galvanised Finish



Option Powder Coated /  
Plastisol Finish



### Typhoon Roller Shutter 3kPa / 4kPa

<b>Curtain</b>	3kPa /4kPa Heavy Duty twin skin insulated lath section 3kPa /4kPa Heavy Duty wind end locks
<b>Guide</b>	Re-enforced heavy duty wind lock side channels complete with double brush seals
<b>Guide support</b>	Steel Restraining plates spaced to give support resistance up to 3kPa / 4Kpa
<b>Seals</b>	Double brush seals
<b>Curtain Finish</b>	Standard Galvanised both sides (Powder coating and Plastisol options available)
<b>Wind Resistance</b>	Resistance to EN 12424 Wind Class 5. Enhanced design to meet minimum pressure resistance of 3,000 Pa / 4,000 Pa.
<b>Speed of operation</b>	Approximately 100-150mm per second
<b>Usage frequency</b>	Maximum 6 operations per hour
<b>Operators</b>	Standard Push Button - Hold to Run (other operators available)
<b>Control Panel</b>	Standard roller shutter control panel - with hold-to-run operation (other operators available)
<b>Size Range</b>	Recommend 8m wide x 4m high ; Max width 10m



Assessed to ISO 9001  
LPCB ref. no 016



Approved to LPS 1056. LPCB ref.016a/01  
Approved to LPS 1271. LPCB ref.016b/01

