

Fitzpatrick s.a.l.

Metal Works & Fire Rated Doors



LINEN CHUTES

Fitzpatrick s.a.l.

Garbage Chutes - Debris Chutes - Odor Control Systems
Access Doors - Fire Doors

Supporting Eco-Friendly Society with Safety



Hotels and Hospitals generate soiled linen on different floors. This used linen needs to be taken to Laundry Room, for sorting and cleaning. Thus Linen (Laundry) Chutes are planned and installed in such a way that laundry disposed from individual floors gets collected in the Laundry Room.

Linen Chutes can be installed in:

- Hotels, Hospitals, Bungalows.
- Residential buildings.
- In any duct, accessible from every floor.

Advantages Fitzpatrick s.a.l. Linen Chutes:

- Facilitates total building Linen collection at one single point.
- Linen disposal with ease and safety.
- Reduces power consumption.
- Widely used all over the World.
- Reduces manpower.

Salient features of Fitzpatrick s.a.l. Linen Chutes

- Manufactured & Installed as per BS1703: 2005 ,NFPA82.
- Weather proof Stainless Steel construction.
- Interlocking of chute - hoppers to achieve one user at a time. Hoppers will remain locked with busy indication for all other floors, when one floor is operating.
- Vent system to allow air movements for vacuum breaking.
- Intake Hoppers are 90 minute fire rated as per UL Label10B.
- Intake Hoppers can be L-hand or R-hand side hinged.
- Discharge end fire door D Type.
- Available indifferent sizes.
- Optional sanitation system for internal cleaning of chutes.

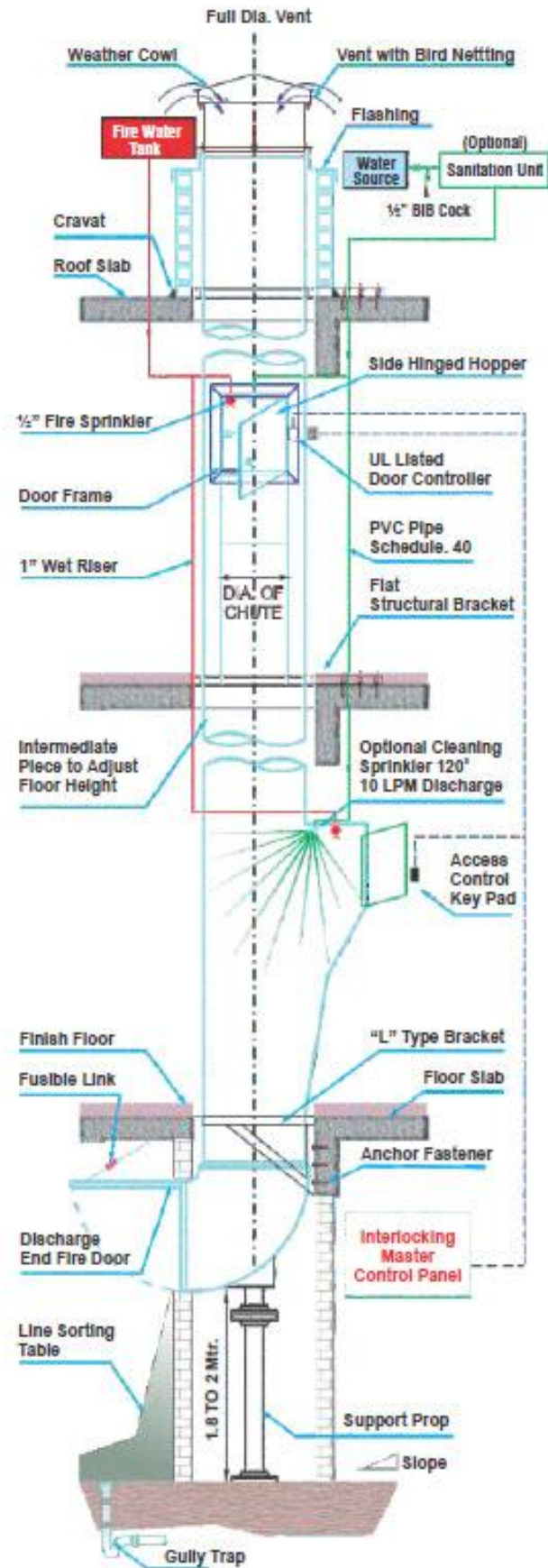


Stand alone access control system dedicated for Linen Chute Only.

- Access control system with 12 digit key pad is provided near the intake hopper 4 digit changeable password for each intake hopper will allow usage by authorized persons only.
- A master password is provided with higher management for overriding any password.



Schematic Layout of Linen Chute



Selection of Chute Diameter

Type of building	Linen chute dia.
Residential	600 mm
Hotels / Hospitals	750 mm

Hopper size for std. chute

Chute Diameter		Hopper Size
		Side Hung
600 mm (18")	Typ. Size	16" x 18"
	Max. Size	16" x 24"
750 mm (24")	Typ. Size	21" x 21"
	Max. Size	24" x 24"

Any bigger sizes are available with max. intake hopper size 30" x 30" Mfg. as per UL Label 10 B.

Material of Construction

- Stainless Steel SS 304 - 1.5 to 2 mm thick.
- Fiber, Plastic chutes are not allowed considering fire hazard, as per BS/NFPA Codes.

Floor Frames

- Total chute weight is divided on each floor.
- MS Galvanized structural frame fabricated from 40 X 40 X 5 mm angles.
- Anchor fastened with floor / beam.

Sound Dampener Coating (Optional)

- Min. 2 mm thick sound deadener coating to reduce sound, if required.

Intake Hoppers

- Laundry Chute Hoppers - Side hung, left or right hand opening.
- Fixed with chute in face with front wall.
- Hopper can be interlocking for "One user at a time" concept.
- 90 minute fire rated as per Underwriters Laboratory (UL) USA.
- As per UL Label 10B. Std. Max. temperature rise of 121 °C in 30 min. (of unexposed surface)

Vent

- Installed at roof level or just above last intake hopper.
- Designed to break vacuum created by falling Linen.
- Provided with weather cowl & bird screen.

Discharge

- Chute shall directly discharge into Laundry room on laundry sorting table.
- 90° diverted discharge at 1.8 to 2 mtr. height above Laundry Room floor level.
- Discharge end fire cut off door.

Linen Trolley

- Customized fabricated trolleys available.

Discharge End Fire Door 'D' type

- Our "D" type discharge end fire rated door is held horizontally against gravity by 79 °C. fusible link. In case of fire, fusible link melts and fire door closes the upward path of chute restricting heat transfer to upper floors.

Fire Protection in Linen Chutes

Manufacturing and installation codes and standards. BS 1703:2005 seen along with BS 476 part 22, NFPA 82, IS 6924:2001, NBC 2005 - clause 3.4.8.3



Door integrity shall remain even after "Hose reel test" at the end of 90min. fire test.



Requirements for Intake Hopper -

- 90 Minute fire rated.
- Passage for flame is not allowed
- If fire exposed side temp. is @1000 °C. then unexposed side temp. shall be 121 °C.
- Door should not fall open after Hose reel test at the end of fire test.
- Inter-locking chute hopper controllers are also UL Listed for user safety.

Fire Sprinklers -

- Opens at 68 °C. to extinguish fire.
- Installed at top and bottom intakes and in between alternate floors. Starting from top .
- 1/2" IPS (BSP) female threading ready to be connected to 1" wet riser of fire protection system.

Discharge End Fire Door -

- 4In case of fire in Laundry room this shall cut off fire path at 79°C.

Duct Size

REQUIRED MINIMUM Duct Size for Installation

Chute Diameter	Duct / Slab Opening
24" (600mm)	32" x 32"
30" (750mm)	36" x 36"
For other sizes	Dia of Chute +8"

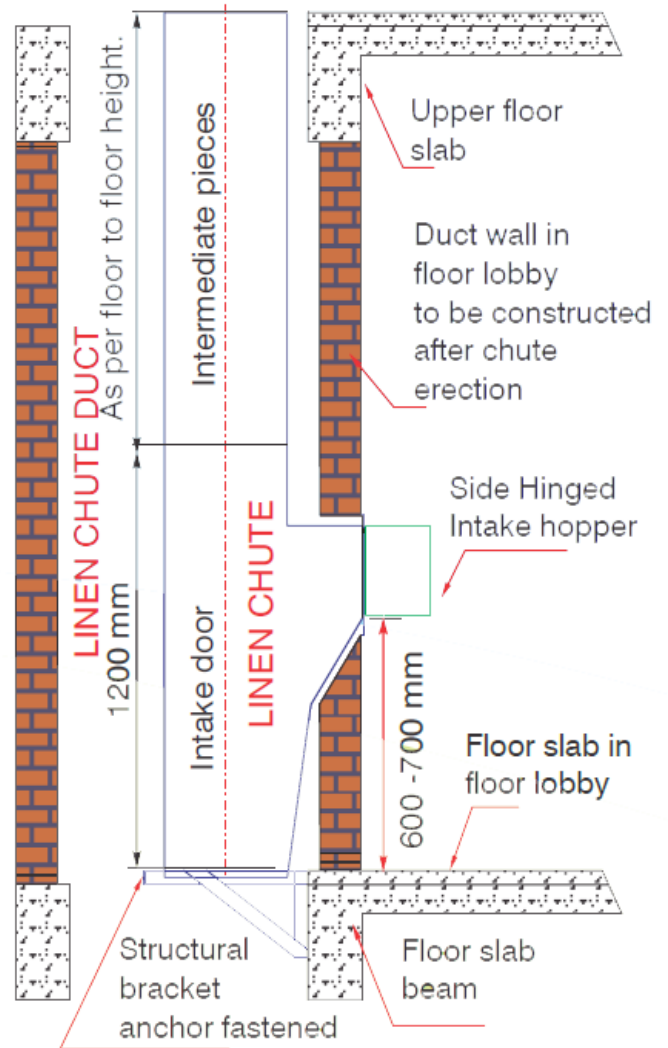
1. Front wall shall be constructed after the erection of chute.
2. Provide 1" wet riser from fire protection system for total building height inside chute duct.
3. Connect fire sprinklers provided by us at top most intake, lower most intake & in between alternate floors starting from top. (Fire sprinklers are provided with 1/2" BSP female threading ready to be connected.)
4. In case of requirement of integral cleaning system, provide predefined water connection as per our requirement

Laundry Room

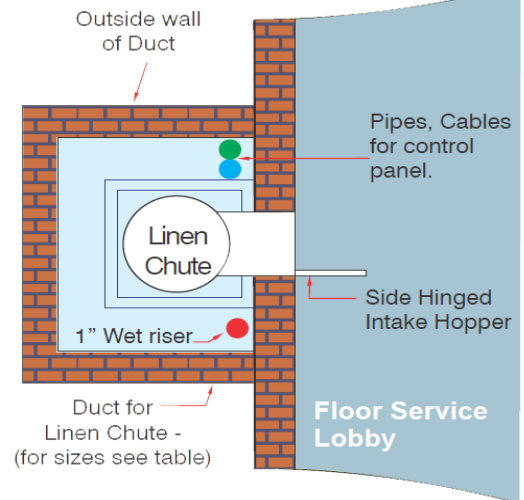
1. Provide wall tiles (min. 1.8 mtr. high) & floor tiles.
2. Floor to have slope towards gully trap connected to drainage/basement sump. (In case of Interval cleaning system.)
3. Provide 6 Amp. MCB, earth, neutral for control panel in laundry room.
4. Lighting arrangement.
5. Provide clear min. 1.5 mtr. wide, outside opening flush door (40 mm thick) to Laundry room.
6. Chute duct slab to be closed in Laundry Room after installation of chute.



Elevation at Linen Chute Duct



Plan at Linen Chute Duct



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