

MOBILE/PORTABLE RESCUE/ESCAPE CHUTE
TECHNICAL SPECIFICATION

1. TOPIC: This covers the technical features of the INGSTROM Mobile/Portable Rescue/Escapes Chute, that are purchased to be used by the fire brigades or the fire service or the fire department or the civil defence for used in their aerial ladder platform fire tucks or skylift trucks for high rise rescue operations and in the practice trainings and emergency rescuing service of the trainees.
2. DEMANDS AND SPECIFICATIONS:
 - 2.1. The escape chute should be made of fire resistant material so that it can be used in flames.
 - 2.2. There shouldn't be any polyester or other flammable materials used in the layers of the chute.
 - 2.3. The escape chute should consist of 3 layers and should be in a single piece that can be used outside of a building and in the fire brigade's vehicles.
 - 2.4. The escape chute should be easily adapted to the various heights of the places to be rescued.
 - 2.5. In the applications to the outside of a building, the escape chute should be used by entrance platform that can be attached to an exit point such as a balcony or a window.
 - 2.6. The entrance frame and platform of the escape chute should be suitable for a quick set up and evacuation.
 - 2.7. The platform of the escape chute and its adjustment legs and arms should be produced from a highly resistant galvanized steel and aluminium alloy material. The stretching adjustment of the legs and arms should be able to be done easily by a key.
 - 2.8. The sliding layer of the escape chute should be resistant to the tension and should be able to carry high weight in the cases of high sliding speed that may occur in the panic atmosphere. The carrier layer that is used should have a tension resistance enough for such cases and have a structure that is strong enough for at least 10,000 kg weight.
 - 2.9. The middle layer of the escape chute should wrap the body in order to stop falling down and should be able to function between -45°C and +175°C.
 - 2.10. The sliding speed of the escape chute should be able to be controlled by the sliding person's hand, arm, elbow, knee or feet.
 - 2.11. The escape chute should have the features that are needed to control the chute from outside. In the transfer of the ones who cannot control their slide such as kids, aged or disabled ones, the rescue team should have means to control the chute and the slide speed.

2.12. The escape chute should be suitable for the rescue that will be done with a stretcher.

2.13. The escape chute should have a bag for carrying and safety.

2.14. The layers of the escape chute should have the minimum specifications expressed below:

2.14.1. Outer chute (the protective layer); the layer that protects from temperature, flame and smoke.

- Material : elektro-glass (with low alkali content)
- Weight : 425 ± 10 gr/m²
- Softening Temperature : 800°C
- Tension Strength :
At Warp : Minimum 1300 N/cm
At Weft : Minimum 730 N/cm

2.14.2. Middle chute (brake layer); not flammable, enables speed control stops falling down.

- Material : 70 % Modacryle, 30 % Elastomer
- Width Tension : 1x 3
- Length Stretch : 1x 1.3
- Weight : 260 ± 5 gr/m²
- Minimum Temperature : - 45°C
- Flame Resistance : Minimum 700°C

2.14.3. Interior chute (friction layer); not flammable, carries weight, prevents the burns and wounds that can be caused by friction.

- Material :
Warp : KEVLAR (Aromatic polyamide aramide fibre)
Weft : Vinylchloride fibre
- Breaking/Resistance Limit:
Warp : Minimum 980 N/cm
Weft : Minimum 380 N/cm
- Deterioration point : 500°C

2.15. Buyers/Users should specify: The escape chute should be ? meters in total length, consist of 1 start piece should be ? meters, ? pieces of prolong segments should be ? meters each.

2.16. Materials used for chute construction are of EU standards. INGSTROM Escape Chute tested by The Josef Tuliszkowski Scientific and Research Centre for Fire Protection, Warsaw, Poland, and is approval for use as "escape chute".