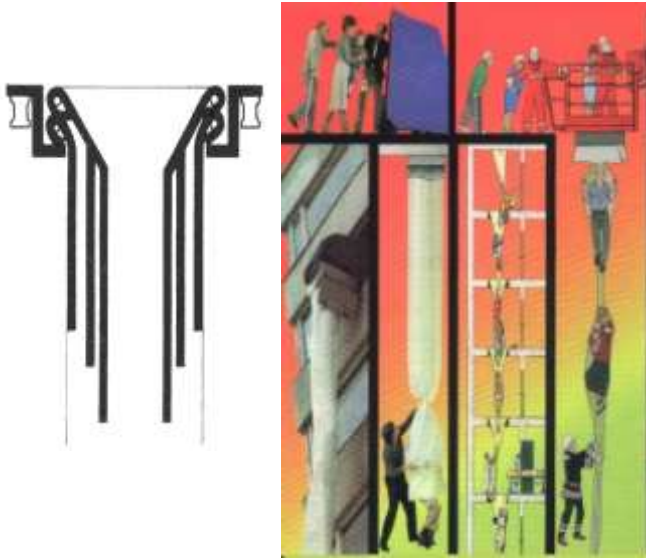


# Supplemental Evacuation Products



 ecoglo  
AUTHORISED RESELLER



## PT ELJE PERDANA

sells experience and solution that goes with the Supplemental Evacuation  
[www.elje4escape.com](http://www.elje4escape.com)

# When Should You Evacuate?



- It is recommended:
- when the alarm goes off**  
(unless it is an alarm test)
- regardless of the type and level of threat

# Fire Safety In High Rise

- ❑ High-rises are equipped with in-built fire fighting systems
- ❑ But if the systems and mitigations failed, fire, smoke, heat and gases can quickly spread through hallways and stairwells
- ❑ Limiting the occupants' chances to escape and the firefighters' ability to rescue them



# Emergency Preparedness

- ❑ If emergency situation gets out of control or when mitigation measures have not prevented disasters or cannot prevent them
- ❑ The ability of swift evacuation in extreme emergencies could save more lives



# Problems In High Rise Evacuation

- ❑ The large numbers of people in the building can make a full evacuation more difficult and time-consuming
- ❑ Stairways are crowded with people fleeing down while firefighters are rushing up



# Problems In High Rise Evacuation

- ❑ Evacuation from high floors by way of numerous flights of stairs, which is very difficult even for healthy individuals, is nearly impossible for people with physical limitations
- ❑ The unreliability of elevators during fire evacuation severely restricts people with physical disability from evacuating as the only alternative would be the stairs



# Pre-Planning Saves Lives



- ❑ How do you empty the total building population of a high-rise in the shortest possible time?
- ❑ How do you get people with physical disabilities down quickly in the absence of elevator?
- ❑ How do you escape from the upper floor when staircases are damaged and not accessible?
- ❑ How do you evacuate occupants inside the building in darkness when the electricity goes out?

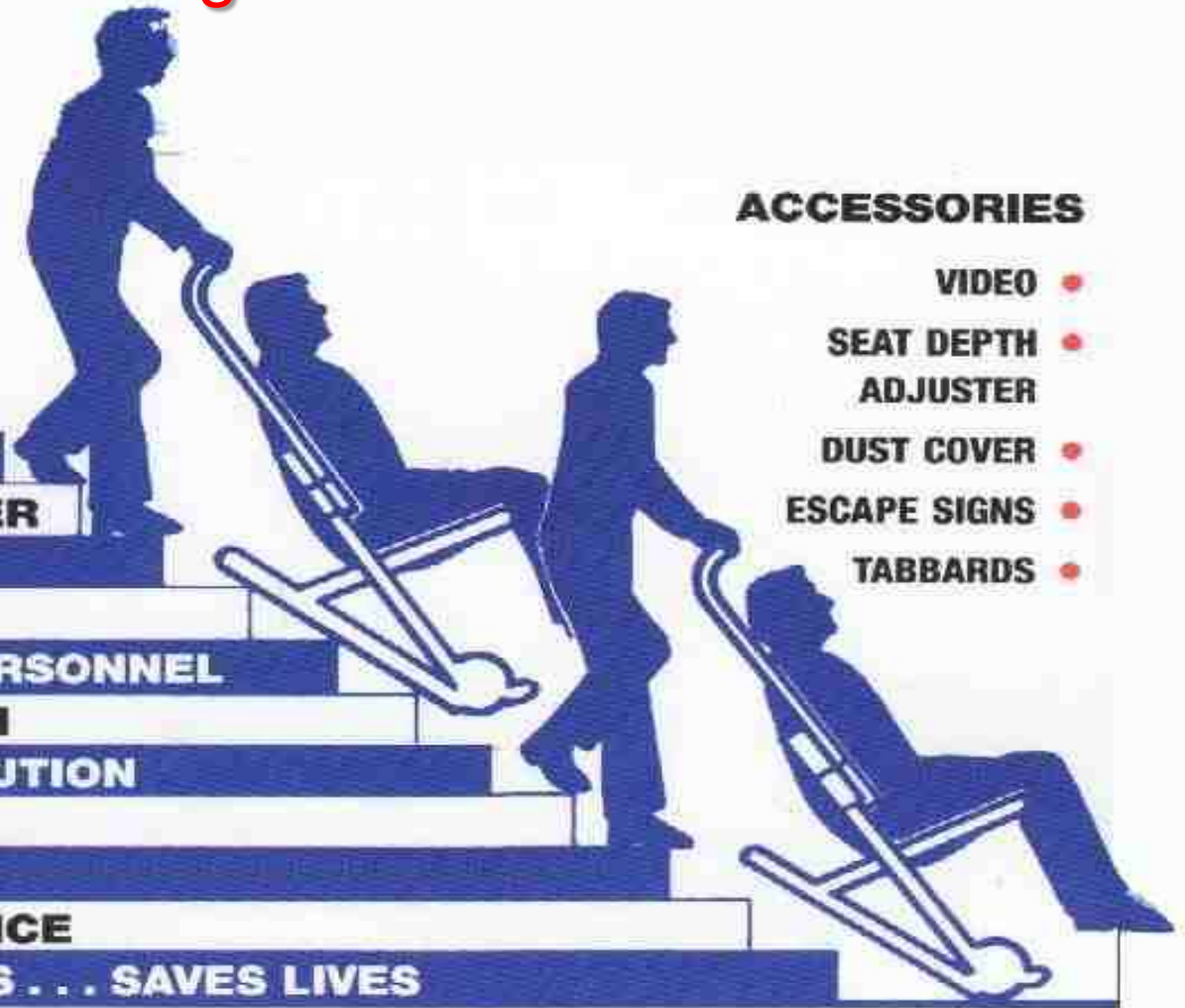
***Pre-planning for “Supplemental Evacuation” provide the answers!***

# The concept of “**Equal Opportunity in Evacuations**” recognised the fact that No One Should Be Left Behind in the event of a large scale mass evacuation

**IT CAN HAPPEN ANY DAY!**

**ARE YOU PREPARED FOR:**

- **FIRE HAZARD**
- **LIFTS OUT OF ORDER**
- **BOMB ALERT**
- **SMOKE WARNING**
- **EVACUATION OF PERSONNEL**
- **BUILDING PROBLEM**
- **MANAGEMENT SOLUTION**
- **CONSULTATION**
- **TRAINING**
- **AFTER SALES SERVICE**
- **SOLVING PROBLEMS . . . SAVES LIVES**



## **ACCESSORIES**

- **VIDEO**
- **SEAT DEPTH ADJUSTER**
- **DUST COVER**
- **ESCAPE SIGNS**
- **TABBARDS**

# NEW SAFETY CODES



Jan. 2009: NFPA Codes APPROVE the use of "Supplemental Evacuation Technology" in high rise buildings to assist in rapid escape in an emergency.

The NFPA also approved the use of Supplemental Evacuation technology in official and/or mandatory Evacuation Plans.



Jan. 2007: ASTM PASSES new Standards for "External Evacuation Devices" for high rise emergencies.

# Supplemental Evacuation Technology

❑ There is no one size fits all solution to pre-planning that alleviating problems in building evacuation planning

❑ A range of ***supplemental evacuation products*** have been developed to provide:-

\* *the redundancy and survivability into the building evacuation system*

\* *additional evacuation capacity and facilitate emergency response access*

\* *efficiency with which people may be evacuated and rescued during catastrophic events*



# Evacuation Chair

- ❑ EVAC+CHAIR is a universal evacuation solution for smooth stairway descent during an emergency
- ❑ Single user operation, light weight and easy to use for people who are mobility impaired in the event of an evacuation of multi-storey buildings

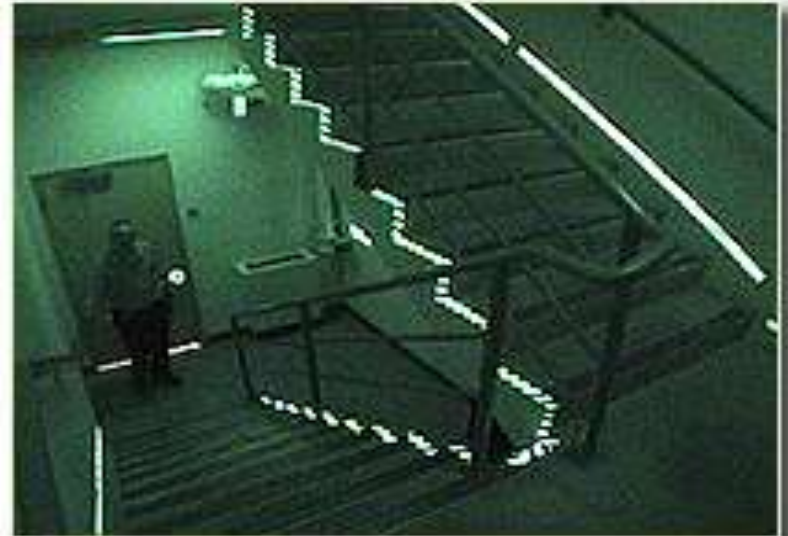
<http://www.evacchair.net>



# Photo-luminescent Glow In The Dark Signs



**Lights On**

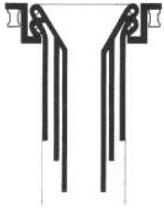


**Lights Off**

Photo-luminescent glow in the dark signs are clearly readable in darkness and in the presence of thick smoke, making them a reliable choice for evacuation guidance during power outages and fires

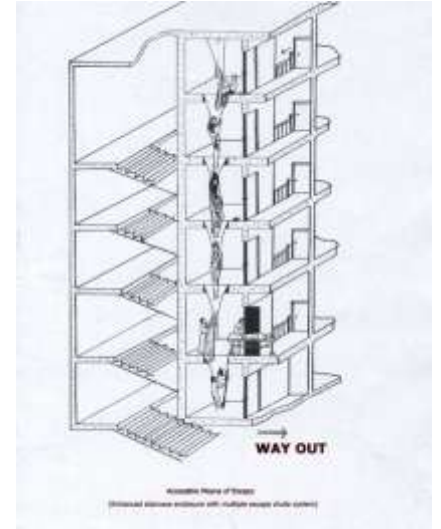
# Glow In The Dark Signage





# Ingström Escape Chute®

## *External, Internal, and Mobile Rescue*



- ❑ Ingström Escape Chute® is an alternative egress system when the exit stairway is blocked and not passable
- ❑ The chute construction protect the evacuees from flame, heat and smoke. It can be used for all people including the old, handicapped, and the unconscious people

<http://www.escapeconsult.com>

# Save A Life



- ❑ S.A.L Self-Rescue System is another means of escape when the exit stairway is blocked and not passable
- ❑ It allows the evacuee to descend from height with the help of special rope system of up to 300m with a regulated speed of about 0.6m per second

<http://www.sal-int.com>

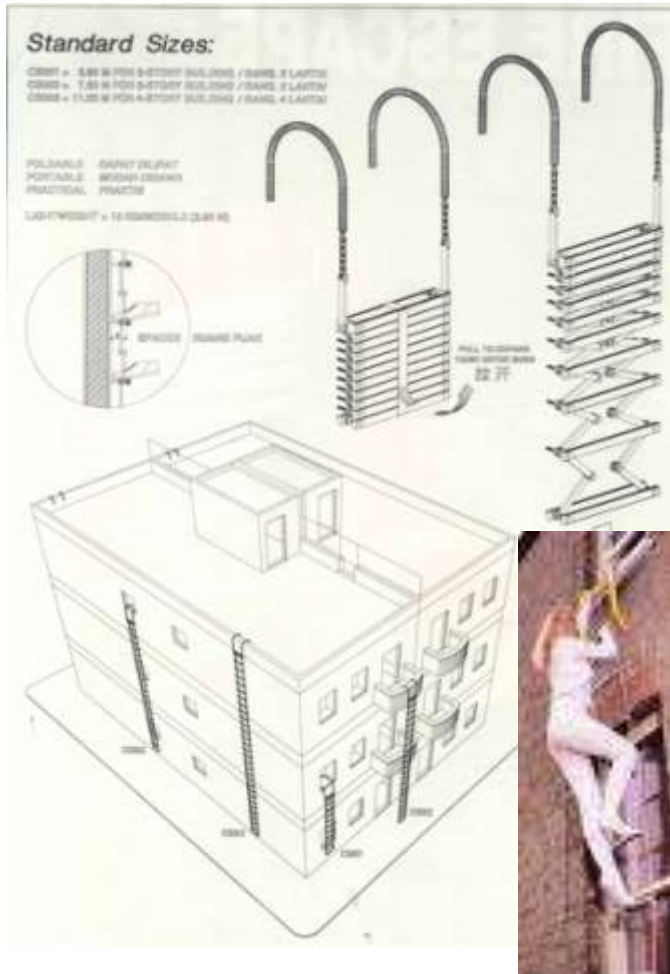
# Advanced Evacuation Solutions Inc.

## portable automated high rise evacuation systems



- ❑ The “automated ReCoverAll high rise escape systems” which is still under developing has the ability to provide reliable power, sophisticated operational protocols, and real time of monitoring of critical functions, permit the use of the escape device as a secondary means of egress in fires
- ❑ This system has the lifting capability in providing fire departments the logistical support to lift their equipment and men up to the tall building.

# Fire Escape Ladder



□ Fire Escape Ladder is a special design ladder with portable – module that can be deployed from window and rooftop of **low rise building** for people to escape from danger if the main stairway is damaged

# **Supplemental Evacuation Are Used In Multi-Storey Buildings**

- 
- Hospitals
  - Schools
  - Universities
  - Banks & Insurance
  - Local Authorities
  - Sports Stadiums
  - Sports Halls
  - Hotels
  - Shopping Malls
  - Offices
  - Leisure Centres
  - Public Buildings
  - Entertainment Centres
  - Homes
  - Factories
  - Emergency Services

# Why Building Management Provides Supplemental Evacuation?

- ❑ No one should be left behind in an emergency evacuation
- ❑ Provides for that second way out
- ❑ Swift evacuation in extreme emergencies could save more lives



# NIST Recommendations

- ❑ Based on its findings for buildings that are at higher risk due to:
  - ***building size, population, iconic status, critical function, or design***
  - should design the egress system to
  - **accommodate timely full building evacuation of occupants**



# Terrorist Attacks Targeting Icon Buildings

- ❑ Twin Towers in New York, USA
- ❑ Ritz-Carlton and Marriott hotels in Jakarta, Indonesia
- ❑ Pearl Continental Hotel in Peshawar, Pakistan
- ❑ Taj Mahal hotel, the Oberoi's Trident hotel and eight other sites in Mumbai, India
- ❑ Marriott hotel in Islamabad
- ❑ Serena Hotel in Kabul
- ❑ 3 Luxury hotels in Amman, Jordan
- ❑ Hotel and beach promenade in Sharm el-Sheik, Egypt
- ❑ Taba and Ras Shitan resorts in Egypt



# Emergency Preparedness



- ❑ If the building's *security / prevention / mitigation* measures and systems failed
- ❑ Or when mitigation measures have not prevented disasters or cannot prevent them
- ❑ Pre-planning for supplemental evacuation could get more people out quicker and more lives could be saved

# Safety Concerns

❑ Are there any safety issues when using “**supplemental evacuation products**” during an evacuation?

- *The use of any new technology incorporate into the building evacuation plan depends on the building management first including the technology in their training and fire drill planning activities.*
- *After building occupants are familiar with the use of the new technology during the fire drills and include that technology in the building evacuation plan, it becomes the same as any other facilities use for aiding evacuation that will become effective in any emergency evacuation.*
- *The people’s fear of entrapment will evaporate when they know there is an alternative way out.*

# PT ELJE PERDANA

An integrated solutions provider for building evacuation – supplemental evacuation:

EVAC+CHAIR

[www.evacchair.net](http://www.evacchair.net)

INGSTROM Escape Chute

[www.mobiltex.se](http://www.mobiltex.se)

SAL Self-Rescue System

[www.sal-int.com](http://www.sal-int.com)

Ecoglo (Glow-In-The-Dark)

[www.ecoglo.com](http://www.ecoglo.com)

If you want to contact us,  
please email us at:

[elje@centrin.net.id](mailto:elje@centrin.net.id)

Or Telephones us at:

**(21)-70714755; (21)-5330430**

If you want to know more about **supplemental evacuation**,  
please visit our website: [www.elje4escape.com](http://www.elje4escape.com)