

# Frangible Airport Fencing

## ICAO's Frangibility Ruling

AERODROME DESIGN MANUAL PART 6, Frangibility – First Edition, 2006 states that:

### 1.3 OBSTACLES TO BE MADE FRANGIBLE

...certain airport equipment and installations, because of their function, must be located in an operational area. All such equipment and installations as well as their supports should be of minimum mass and frangible in order to ensure that impact does not result in loss of control of the aircraft. Among these equipment are for example:

- fencing

### 3.1 OPERATIONAL REQUIREMENTS

#### Fencing

3.1.11 The fence and its gates have to be sufficiently stable to serve the purpose and cannot be made frangible without detrimental effects to their intended function. However, the structure should be segmented and the design such that failure mode of the structure would be "windowing" in the event of an airplane colliding with the fence.

3.1.12 Notwithstanding the above, a light weight frangible fence should be installed when located between frangible lighting towers or when located to protect ILS critical and sensitive areas against unlawful interference.



Exel frangible fences are transparent to electromagnetic signals, easy to install and practically maintenance free.



## Frangible Exel Fencing

The fence is assembled at the site from pre-assembled panels and posts.

### Panels

- The panels are available in **two widths, 1,0 m and 2,0 m.**
- Standard height of the panel is 1,9 m which makes the fence an average of **2 m height from the ground level.**
- Other panel heights are available on request.
- Free space between panel uprights is 90 mm.

### Corners

- The fence can be installed in straight line, with **90° and 45° corners.**

### Gate

- Gate can be supplied with **single leaf or double leaves.**

Both the fence panels and the gates can be fitted with serrated climbing prevention bars.

### Colours

- Standard colours for the fence are **aviation yellow and FAA orange.**
- Other colours are available on request.

### Maintenance

- Frangible Exel fence is **UV-protected and maintenance free.**

### Spare parts

- In case of accident the posts and the panels can be replaced individually.

Exel airport fences are full scale impact tested to prove compliance with ICAO's frangibility ruling for approach support structures.



Delivery of Exel frangible fence includes:

- Panels
- Posts with panel clamps
- Cross-pin for bottom of post for setting in soft ground
- Corner connectors
- Gate with two hinges
- Locking plates for padlock
- Illustrated installation manual



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