



DESIGNING BUILDINGS – DESIGNING SAFETY

**INTERNATIONAL SAFETY AND
HEALTH CONSTRUCTION
CO-ORDINATORS
ORGANISATION**

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ISHCCO

Represents national bodies in Europe whose members are construction safety and health co-ordinators

Membership includes 10 European countries, two like minded bodies and a number of Associates.

Professional bodies in the UK

- Association for Project Safety
- Institution of Occupational Safety and Health.



OUTLINE

Requirements

Risks

Solutions

Information.

Framework Directive – designers need to consider the health and safety of users

But also remember the balance between health and safety and other considerations

No such thing as risk free

However must be able to carry out operation safely.

Temporary or mobile construction sites

Directive 92/57/EEC Annex 1

7. Renovation

8. Repairs

11. Upkeep

12. Maintenance - Painting and cleaning work.



CONTRACOTRS

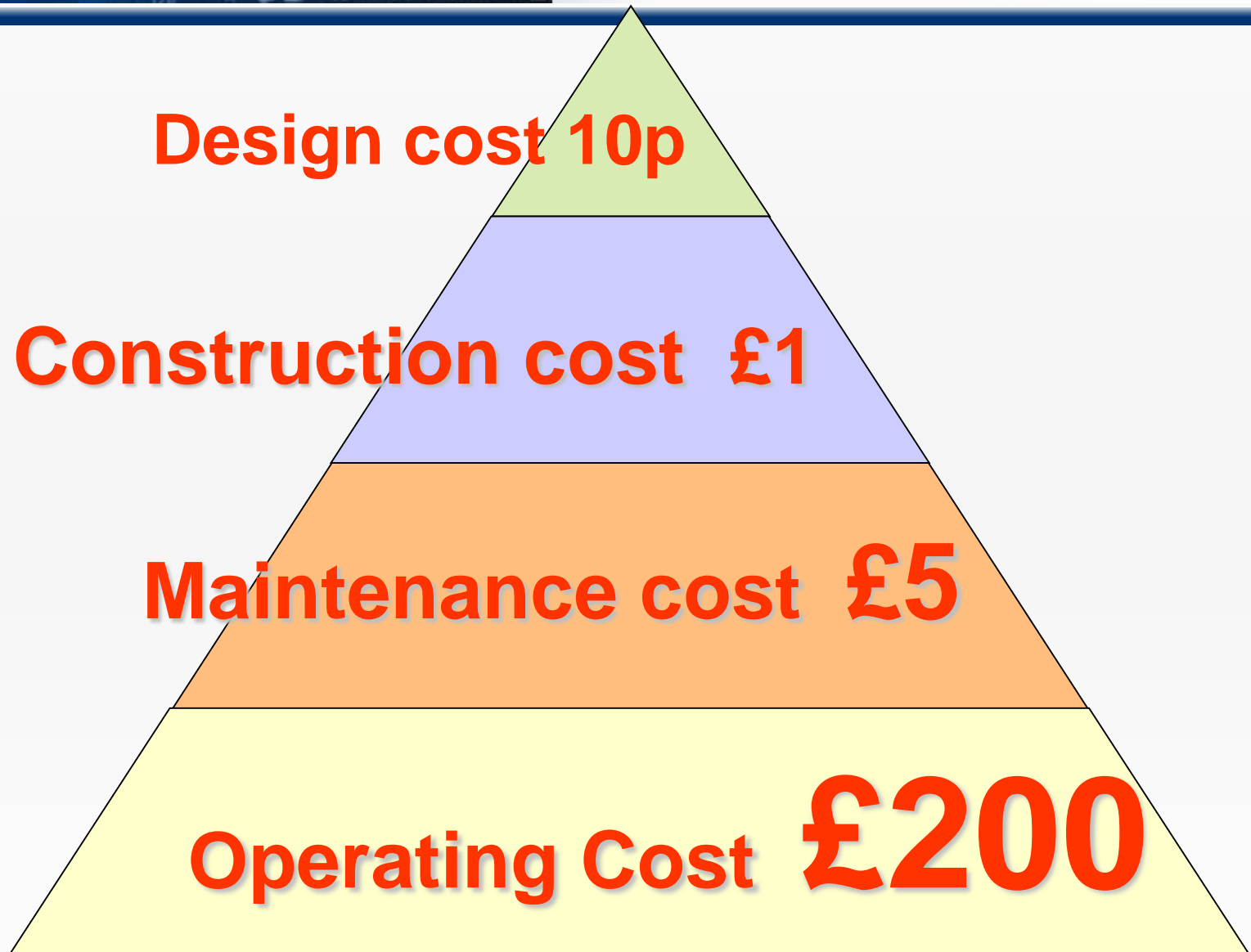
We must assume that we have competent contractors, but ...

Accidents related to maintenance

- Belgium - 20% of all accidents in 2005-2006
- Finland - 18-19%
- Spain - 14-17%
- Italy 10-14% in 2003-2006

Fatal accidents related to maintenance

- Data from several European countries indicates 10-15% of all fatalities in 2006



Routine maintenance activities

- Generally not 'frequent'
- Carried out many times over building's 60 year life cycle

'One off' maintenance projects

- Frequency determined by initial design choices about lifecycles
- Plant
- Roof covering.

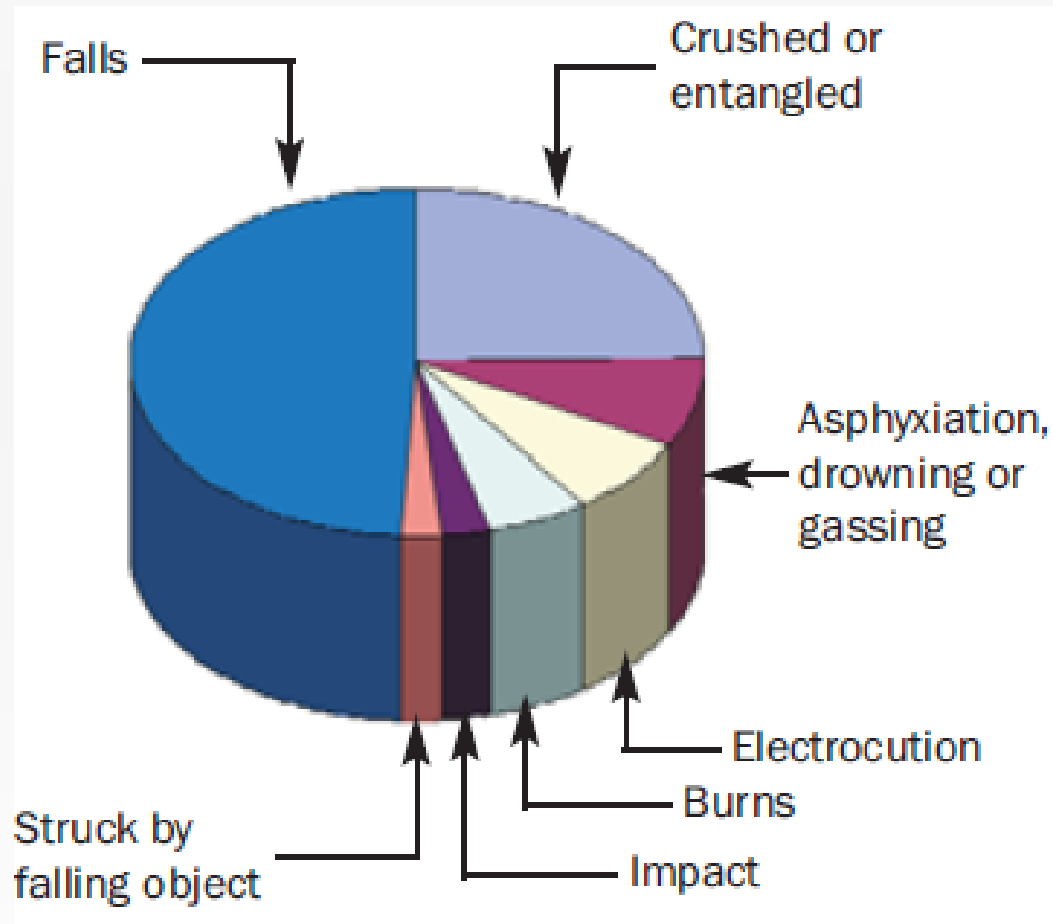


CONSEQUENCE

Significant features of maintenance operations

- Work at height
- Manual handling
- Health issues – asbestos, lead in paint, etc
- Confined spaces.

Fatal accidents during maintenance work





SOLUTIONS

Eliminate maintenance operations e.g. select maintenance free finishes

Eliminate risks from maintenance operations e.g. by providing safe access.



DESIGNERS

- Future Construction Phase
 - Facade maintenance/cleaning
 - Changing 'lightbulbs'
 - Roof top activities.



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PROSECUTION

- Fatality – 9m fall from height when carrying out air conditioning repairs
- Architect £120k; Principal Contractor £75k
- HSE Inspectors said: “while it is rare for designers to be charged with breaching health and safety legislation ... they can be held responsible where bad design is an important contributory factor to a workplace fatality”.

- Safe access for maintenance and repair.
Guidance for designers 2nd Ed 2009 CIRIA
- Experienced maintenance contractors
- Space requirements for plant access,
operation and maintenance Defence Works
Functional Guidance Design and
Maintenance Guide 08
- Draft non-binding Guide to Good Practice for
understanding and implementing 92/57/EEC.

TMCS 92/57/EEC Article 5(c)

“prepare a file appropriate to the characteristics of the project containing relevant safety and health information to be taken into account during any subsequent works”

Health and Safety File