

## Design Safety - Good Practice

### Design of building to allow installation of plant and equipment

#### The problem/challenge

Installation of items of mechanical and process plant into completed building.

#### The risks

Manual handling large heavy items of plant leading to strains and crushing / trapping injuries.

#### The solution

Design building orientation and structure so that one wall facing a road can be left off until after the plant has been installed (with a telehandler).



1 install building

2 install plant

3 clad front of building

#### The benefits

- Elimination of some manual handling by ensuring telehandler access throughout construction
- Improved site access allows for safe delivery of materials
- Construction speed increased therefore reduced time on site and reduced risk

#### Key points

- Civil engineer understood the risks of other activities
- All the design team should be aware of the full design
- Consider construction order in design and planning

Site is Anglian Water Mousehold WTW Norwich UK 2011.