

DESIGN STRATEGY FOR CONSTRUCTION H&S

This list includes certain key hazards/activities that need to be identified/addressed at the outset of design to ensure the health & safety of those carrying out or affected by construction activities. Relevant items must be included within the project design risk assessment process. The list is not exhaustive and must be supplemented by project-specific hazard identification and design risk assessment. The list also includes some features that can be incorporated within the design to improve health & safety. When completed this document becomes a project-specific 'Strategy for Construction H&S' against which the developing design can be monitored.

If the answer to any question is NO then significant residual risk information will normally be required to enable the contractor to take that hazard into account when planning the work.

	Hazard/Activity	Yes	No	N/A	Strategy to Avoid/Reduce/Control Hazard by Design and Planning			Consultations / Approvals / Standards
					Details	Owner	Fix Date	
1	Can the structure/works be positioned, planned or designed to avoid risks from the following site hazards?							
1	Traffic movements to, from and within the site							
2	Work in occupied or partially occupied premises							
3	Asbestos							
4	Presence/storage of hazardous materials eg waste chemicals							
5	Buried site services, including gas pipelines							
6	Overhead cables							
7	Contaminated ground							
8	Unsafe existing structures							
9	Disturbance to existing fire compartments, escape routes, fire warning/suppression systems							
10	Lack of information re existing site/structure/ ground conditions							
11	Hazards that could cause multiple fatalities to the public, eg tunnelling, use of a crane adjacent to a busy public place, major road or railway							
12	Dismantling/demolition							
13	<i>Other project-specific</i>							
14								
2	Can the project be designed to minimise health hazards?							
1	Use of less hazardous materials, eg solvent free or low solvent adhesives and water-based paints							
2	Avoidance of processes that create hazardous fumes, vapours or dust							
3	Avoidance of processes that create noise or vibration							
4	Use of materials that are easy to handle, eg lighter weight building blocks							
5	Design of block paved areas to enable mechanical handling and laying of blocks							
6	<i>Other project-specific</i>							
3	Can the project be designed avoid the following safety hazards?							
1	Fragile roofing materials, including roof lights							

	Hazard/Activity	Yes	No	N/A	Strategy to Avoid/Reduce/Control Hazard by Design and Planning			Consultations / Approvals / Standards
					Details	Owner	Fix Date	
2	Deep or long excavations in public areas or on highways							
3	Processes or materials that could cause a significant fire hazard during construction							
4	Need for work at height from ladders or where a safe means of access/work is not provided							
5	<i>Other project-specific</i>							
4	Can pre-fabrication be used to minimise hazardous work or allow it to be carried out in more controlled conditions?							
1	Design of structural steel or process plant so that sub-elements can be assembled at GL and lifted into place							
2	Arrange for cutting to size to be done off-site							
3	<i>Other project-specific</i>							
5	Can the following features be designed in where it is not possible to avoid work at height?							
1	Early installation of permanent access, such as stairs							
2	Permanent edge protection							
3	<i>Other project-specific</i>							
6	Can the following features be designed in to simplify safe construction?							
1	Provide lifting points and mark the weight centre of gravity of heavy/awkward items on drawings and items themselves							
2	Make allowance for temporary works required during construction							
3	Design joints in vertical structural steel members for bolting up by someone standing on a permanent floor and by seating angles to give support while bolts are put in place							
4	Design connections to minimise risk of incorrect assembly							
5	<i>Other project specific</i>							
7	Can the project be designed to simplify future maintenance and cleaning work?							
1	Make provision for safe permanent access							
2	Make provision for safe cleaning of internal/atrium glazing							
3	Specify windows that can be cleaned from the inside							
4	Design plant rooms to allow safe access to plant and equipment							
5	Design plant room access to allow safe removal and replacement of large and bulky plant							
6	Design safe access for roof mounted plant and for roof maintenance							
7	Avoid confined spaces							
8	Avoid inadequate headroom							

	Hazard/Activity	Yes	No	N/A	Strategy to Avoid/Reduce/Control Hazard by Design and Planning			Consultations / Approvals / Standards
					Details	Owner	Fix Date	
9	Make provision for safe temporary access to allow for painting and maintenance of facades etc eg allow for access for MEWPs or for erection of scaffolding							
10	Make provision for cranes and other heavy equipment, eg access and hard standings							
11	<i>Other project-specific</i>							
8	Can the structure be designed to avoid dismantling/demolition hazards?							
1	Sources of substantial stored energy, including pre- or post-tensioned members							
2	Unusual stability concepts							
3	<i>Other project-specific</i>							
9	Other Project-Specific Issues							
1								
2								
3								
4								

Sign-Off	The above records hazards that are foreseeable at this stage of the project, based on information currently available. These issues and any others identified as the design progresses will be taken into account within the design risk assessment process. The strategies outlined above will be incorporated into the design, in order to eliminate or reduce hazards, to the extent that the strategies are proved to be reasonably practicable				The above is based upon all information reasonably available concerning existing conditions at the site and in surrounding areas		The above satisfactorily addresses the need to eliminate and control key H&S issues at this stage of the project	
	Architect	Structural Engineer	Civil Engineer	M&E Engineer	Client		Innov8 CDM-C	
Signature:								
Name:								
Organisation:								
Date:								
Comments:								