International Hazard Datasheets on Occupation

Building contractor

Who is a building contractor?

A building contractor is a building worker who contracts to perform specified construction work in accordance with architects' plans, blueprints, codes and other specifications; he estimates the costs of materials, labour, and the use of equipment required to fulfill provisions of a contract; prepares bids; confers with clients to negotiate terms of contracts, subcontracts specialized craft work, such as electrical, structural steel, concrete, and plumbing; purchases material for construction; supervises workers directly or through subordinate supervisors; may be designated according to specialty license or scope of principal activities as Contractor, General Engineering (construction).

What is dangerous about this job?

- Falls from elevated surfaces (raised floors, verandas/surfaces without a railing, etc.); falls into a cellar, shaft, or open pit, etc., while working at or visiting building and construction sites.
- Slips, trips and falls on the level.
- Being hit by falling objects.
- Stepping on sharp objects; colliding with sharp and/or protruding objects.
- Being hit by mechanized engineering equipment at the work site.
- Eye injury caused by splinters/ricochets of stone and metal produced in demolition, drilling, cutting and similar operations
- Skin inflammation and a risk of developing chronic obstructive pulmonary disease (COPD), as a result of contact/inhalation of cement and building dust.
- Stepping on sharp objects; colliding with sharp and/or protruding objects.
- Injury of the musculoskeletal system, as a result of work posture, lifting of heavy loads, repetitive stress, over-pressure of the joints, etc.

Hazards related to this job

Specific preventive measures can be seen by clicking on the respective in the third column of the table.

<table>
<thead>
<tr>
<th>Accident hazards</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Falls from elevated surfaces (tall floor, veranda/surface without a railing, etc.); falling into a cellar, shaft, or open pit, etc., while working at or visiting building and construction sites</td>
<td>1</td>
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<tr>
<td>Slips, trips or falls on the level</td>
<td>2</td>
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<tr>
<td>Being hit by falling objects (stones, blocks, hammers, work tools, wooden planks, etc.), while working at or visiting building and construction sites</td>
<td>3</td>
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<tr>
<td>Stepping on sharp objects (e.g. wooden boards with nails protruding from it, sharp work-tools, chisels, etc.); colliding with or being hit by sharp and/or protruding objects</td>
<td>3 4</td>
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<tr>
<td>Hernia or rupture of a disk-vertebra, as a result of excessive stress or of a sudden physical manoeuvre</td>
<td>5</td>
</tr>
<tr>
<td>Physical hazards</td>
<td>Over-exposure to solar radiation while carrying out building work outdoors, without being properly dressed for work</td>
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<td></td>
<td>Considerable risk of catching cold as a result of strong draughts during the winter and during rainy periods</td>
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<tr>
<td>Chemical hazards</td>
<td>No chemical hazards specific to building contractors were identified, but at a work site they could be exposed to certain risks created by other workers – for example: exposure to paint thinners and solvents, while at the same time a paint job is being done at the site; when work is being done inside an existing industrial plant the various building workers, the building-contractor included, may be exposed to the specific chemicals in use at that plant. When a contractor (usually a self-employed and/or relatively inexperienced worker) performs by himself certain kinds of construction work he may be exposed to various chemical hazards typically encountered by to building and construction workers</td>
</tr>
<tr>
<td>Biological hazards</td>
<td>There are no specific biological hazards specific to the work of contractors. However, they could contract various diseases, such as dermatitis caused by contact with bird secretions and with parasites residing at birds' nests; bites by mosquitoes, other insects and pests; etc.</td>
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<tr>
<td>Ergonomic, psychosocial and organizational factors</td>
<td>Injury of the musculoskeletal system, as a result of work-posture, lifting of heavy loads, repetitive stress, over-pressure of the joints, etc.[Note 3]</td>
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<td></td>
<td>Vibrations influencing a specific body organ (e.g. injury of wrist or of the spinal column while performing demolition work, using heavy hammers, vibrating machinery and other tools) [Note 3]</td>
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<td></td>
<td>Physical and chemical factors causing discomfort and suffering (e.g.: air pollution, bad odours, disturbing noise, defective illumination, sick building syndrome, etc.)</td>
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<tr>
<td></td>
<td>Psychosocial factors specific to the person or the workplace, including human relationships, conflicts with other workers, communication difficulties with superiors or with the financial sponsors of the project, problems of subordination, time-schedules, shift work, etc.</td>
</tr>
</tbody>
</table>

**Preventive measures**

All work surfaces must be securely installed in order to prevent their collapse/break and the falling down of
people or objects; they should be securely fenced by railings (lower, middle and upper planks) that has to be in good condition; when needed additional safety means should be added; all openings must be fenced

Safety shoes with non-slip soles must be worn; roughening of work surfaces should be considered

Personal protection equipment for total body protection, including crash-helmet, safety-shoes, goggles, etc.

Work surfaces, floors, footpaths and similar areas should be clean and free of protruding nails, wires and all other obstructions

Manual lifting of heavy loads should be prevented; it is desirable to use lifting aids as far as possible

Work clothes should conform to weather conditions; verify that the workers drink enough water in order to avoid dryness; use gloves and safety clothes according to need and local conditions

Contact the police in any event of threat or physical attack

Weigh the possibility of spraying the areas infected/suspected as hatching and nesting areas of noxious pests.

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**Specialized information**

**Synonyms**  Construction contractor [Note 1].

**Definitions and/or description**  Contracts to perform specified construction work in accordance with architects' plans, blueprints, codes, and other specifications: Estimates costs of materials, labour, and use of equipment required to fulfill provisions of contract and prepare bids. Confers with clients to negotiate terms of contract. Subcontracts specialized craft work, such as electrical, structural steel, concrete and plumbing. Purchases materials for construction. Supervises workers directly or through subordinate supervisors. May be designated according to specialty licenses or scope of principal activities as Contractor, General Engineering (construction); Contractor, General Building (construction).

**Related and specific occupations**  Architect; building-engineer; building-inspector; building-supervisor; civil engineer; construction-engineer; mason.

**Tasks**  Acquisitioning; advertising; arranging; assessing; building; buying & selling; calculating; conducting (negotiations); coordinating; discussing; employing; enterprising; estimating (costs); initiating; marking (plot and building lines); measuring; organizing; pricing; promoting; reading (blueprints); renting (equipment); signing (contracts); specializing; studying; supervising;

**Primary equipment used**  Building-materials (cement, gravel, gypsum boards, iron, wood planks and boards, sand, whitewash, etc.); building power-machines; computer; heavy-mechanical-equipment (acc. to the specific type of work); hoists and levers; ladders; measuring-tools; manual and power work tools; motor vehicles (inc. front-drive cars); sanitary-installation equipment; scaffolding.

**Workplaces where the occupation is common**  Building-contractors organizations; building and construction sites; building, construction & housing companies; houses and apartments that are renovated; private contracting companies; etc.
Notes

1. There are various types of contractors: “registered contractor”, “recognized contractor”, “chief contractor”, “sub contractor”, “building-frame contractor”, “renovation contractor”, etc. Each country has its own licensing and classification requirements regarding the various types of contractors.

2. The safety and hygiene hazards of a building contractor, esp. in relatively small construction sites where the contractor himself is doing some of the mason’s tasks, are very similar to those of the mason; therefore it is also recommended to consult the hazard datasheet of a “mason”

3. Many of the contractors used to work previously as masons or as other specific building workers; they could still be affected by past occupational injuries or diseases.

References


This datasheet was authored by a group of experts headed by prof. Donagi from the Israel Institute for Occupational Safety and Hygiene

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