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*NEBOSH CERTIFICATE (NCC1)*

*Final Review*

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C. CONSTRUCTION USEFUL DEFINITIONS

**Anchor Bolt** - A bolt embedded in concrete used to hold structural members in place.

**Beam** - A horizontal framing member designed to carry a load from a set of joists or a roof and spanning an open space. Beams are typically 6 inches by 6 inches or 4 inches by 10 inches or larger.

**Calcium Carbonate or Efflorescence** - A white chalky material, which is very often found on concrete basement walls and other concrete surfaces where water has leached some of the chemicals out of the concrete. The appearance of the material is typically a sign of past or present moisture penetrations.

**Carbon Monoxide (CO)** - A toxic colourless and odourless gas that is the by-product of combustion from fireplaces, furnaces, grills, generators, and hot water heaters. These require proper installation and service in order to prevent CO exposure. CO testing must be a regular part of the annual gas furnace service. In addition, a CO alarm should be placed in every home.

**Circuit Breaker** - A device that looks like a switch and is located inside the electrical panel or circuit breaker box in a home or building. A regular circuit breaker switch is designed to shut off the power to the portion of the home it controls and also limits the amount of power flowing through a circuit (measured in amperes). A main circuit breaker switch is designed to shut off the power to the entire home.

**Concrete** - A construction material used for foundations, ground level floors and sidewalks. Most concrete is made out of Portland cement, sand, and gravel or aggregate. Concrete is commonly reinforced with steel rods, known as rebar or wire screening, called mesh.

**Concrete Block** – Often used in low rise commercial and some residential construction, a hollow concrete 'brick' most commonly 8 inches x 8 inches x 16 inches in size. The original design and use is attributed to the architect Frank Lloyd Wright.

**Construction** – This is defined in CDM as construction, alteration, conversion, renovation. It includes:

- building repair, redecoration, maintenance, decommissioning and demolition
- preparation for a structure
- assembly and disassembly of prefabricated elements
- removal of a structure
- installation, commissioning, maintenance of services fixed within the structure.

**Construction plant competence scheme – Recognised card scheme for plant operators focus on qualification and experience.**

**Construction industry scaffolders record scheme – This is managed by the National Access and Scaffolding Confederation and training provided by the CITB, there are three types of card:- trainee, basic and advanced.**

**Construction skills certification scheme – 240 occupations covered and central records of those who have achieved the test are kept centrally.**

**Contaminated ground – This is ground potentially containing harmful chemicals such as asbestos, mercury, fumes, gases or even biological organisms such as anthrax.**

**Demolition – Removal of a structure or load bearing section of a structure.**

**Designer - One who designs houses, interiors, landscaping or other objects. When utilized in the context of residential construction, they may or may not be a qualified architect. Term used in CDM.**

**Drywall or Gypsum Wallboard (GWB) or Sheet rock or Plasterboard - A wall finish consisting of a manufactured panel made out of gypsum plaster and encased in a thin cardboard. It is usually ½ inch thick and 4 feet by 8 feet or 4 feet by 12 feet in size. The panels are nailed or screwed onto the framing and the joints are taped and covered with a 'joint compound'.**

**Eaves - The lower, level part of a roof overhanging a wall.**

**Elevation - An Elevation is the view of the side of the house or a wall in a room as if the viewer is standing back and looking straight at it. This drawing shows each side of the house including the foundation and roof. It shows the configuration of the windows (sliding, casement, awnings, etc.), the outside doors, handrails, gutters, the pitch and overhang of the roof, the siding, roofing, and any chimneys.**

**Flashing - The building component used to connect portions of a roof, deck, or siding material to another surface such as a chimney, wall, or vent pipe. It is often composed of various metals, rubber or tar and is mostly intended to prevent water entry**

**Form 10 – Notification to the HSE of notifiable construction project of over 30 days or where there will be 500 person days or more. (Reportable under CDM 2007)**

**Fuse - A device often found in older homes designed to prevent overloads in electrical lines.**

**Fascia** - The trim piece nailed to the ends of a series of rafters or trusses to tie them together at the lower, level end of a roof. The fascia supports the sheathing on the edge of the roof as well as the front edge of the soffit.

**Fascia Board** - The exterior finish nailed to the fascia that is nailed to the rafter or truss ends that runs horizontally around the roof on which the gutters are mounted. The fascia board forms a drip edge for rain water, as well as hides the end of the roof sheathing and soffits.

**Head protection** – All those at risk from construction and engineering activities should be provided with suitable head protection this may include bump caps as well as full hard hats. Areas where there are not risks from falling objects may be designated areas where head protection must not be worn. Any head protection must carry the CE mark and be suitable for the wearer. Head protection protects from falling objects not the risk of falling people.

**Joist** - One of a group of structural members designed to support a floor or ceiling load. When the member supports a ceiling as well as a roof it is called a roof joist.

**Lifting Equipment** – work equipment for lifting or lowering loads including winch, pulley, hoist and crane etc.

**Load Bearing Wall** - A wall that is supporting its own weight and some other structural elements of the house such as the joists.

**MDF (Medium-Density Fibreboard)** - An engineered wood made from softwood fibres that were mechanically separated, then randomly combined, glued and pressed so the material has no grain, but is consistent throughout. It swells if wet unless treated.

**Mobile crane** – crane able to travel under its own power, doesn't normally include track mounted cranes.

**Principal Contractor** – The lead contractor appointed by the Client to undertake a notifiable CDM construction project. Must be competent and have adequate resources.

**Radon** - A naturally-occurring radioactive gas common in many parts of the country often associated with lung cancer. Mitigation measures may involve crawl space and basement venting and various forms of vapour barriers.

**Rated capacity plates** – These are affixed to lifting equipment such as fork lift trucks to show their maximum safe working load and the different heights and reaches which are acceptable.

**Relative Humidity** - The ratio of the amount of water vapour in the air at a specific temperature to the maximum amount that the air could hold at that temperature, expressed as a percentage.

**Safe Working Load – (SWL) the maximum load that can be safely lifted by an item of lifting equipment.**

**Structure – “any building, steel or reinforced structure, railway line, tramway line, dock, harbour, bridge, shaft.....or structure designed to preserve or alter any natural feature.” Also includes formwork, false work, scaffold used to provide support or provide a means of access during construction work.**

**Stud - A vertical support member giving most of the strength to walls. These are usually 2x4s spaced 16" apart that wallboard (drywall mostly).**

**Substance – any natural or artificial substance in solid, liquid, gas or vapour form includes biological micro-organisms.**

**Total Rise - 1) With stairs: The total height of a staircase which extends from the lower level up to the surface of the upper level. A staircase built from one floor up to another floor has a total rise of exactly one storey. 2) With a roof: the total rise is the vertical distance from the top of the roof to the top of the walls.**

**Truss - A structural unit made up of crosspieces to provide support, over large spans, for a roof or bridge. A truss is designed to give the most lift using the least amount of material so its own weight is minimized.**

**Thorough examination – A number of pieces of specific work equipment and situations must be thoroughly examined at statutory intervals, this includes lifting equipment, local exhaust ventilation, cofferdams and scaffolding.**

**Vehicle – any mobile plant**

**Working platform – An area close boarded with guard rails and suitable access via a ladder or access steps, used as a place of work. May be part of scaffolding or trestles.**