

## FLOOR CONSTRUCTIONS

### Overboard™ Low Profile Dry Screed Board

#### Overview

Maincor Overboard™ Systems provide a solution for low profile retrofit Underfloor heating applications. Ideal for projects such as extensions, kitchen refurbishments or upgrading domestic heating systems. The system is quick and easy to install, offering an energy efficient solution and a comfortable internal environment for building occupiers, that will add value to a property.

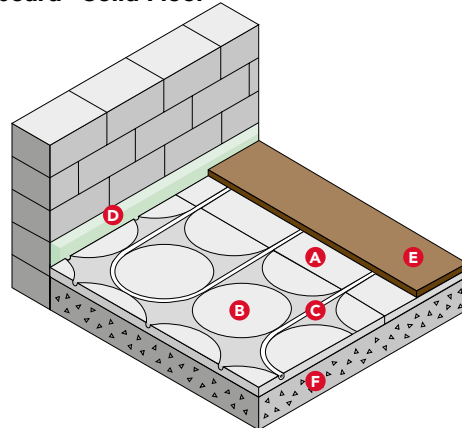
The underfloor heating pipes (12mm Multi-Layer Composite Pipe) are laid within 18mm thick, pre-routed, high density dry screed boards at 150mm centres, offering a low profile solution which lends itself to situations where minimal floor height adjustments are desired. Due to the physical properties of Overboard™, the panels allow the heat to spread effectively across 100% of the heated area.

- **Suitable for Most Properties** - Overboard™ is only 18mm thick, therefore only a minimal increase in floor level is required.
- **Flexible** - Can be incorporated into existing heating systems.
- **Compatible** - Works with traditional boilers or renewable heat sources.
- **Cost Effective** - Lowers heating bills.
- **Environmentally Friendly** - Lower CO<sub>2</sub> emissions.

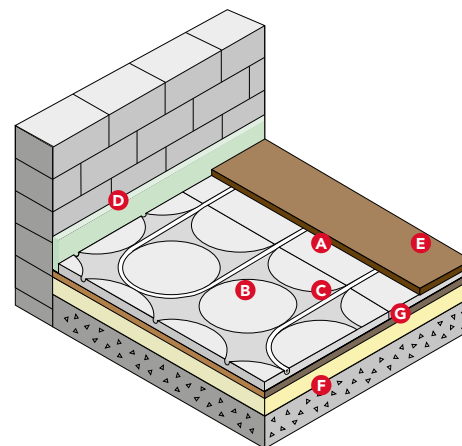
#### Features and Benefits

- **Low Profile Heating System** - Only 18mm high, minimal increase to floor height.
- **Dry Assembly** - Dry alternative to wet screed systems which reduces the time on site, benefitting the build programme.
- **Thermal Comfort** - The dense boards conduct heat evenly, creating a uniform heat distribution.
- **Space Saving** - Where maximum room area is at a premium.
- **Unobtrusive** - Minimum disruption when installing in existing buildings.
- **Full Room Coverage** - The entire floor area is acting as a heat emitter which provides a higher output than an alternative plastic end-panel system.
- **Quality Material** - Precision engineered, tight tolerances and quality assured.
- **Fixing Points** - The boards have 3 fixing points on each channel which makes it far quicker to install the pipes.
- **Easy Planning** - The end returns are exactly half the size of the main boards which means that less cutting is required and it's quicker to plan and install.
- **Solid Finish** - The boards are fixed down which gives a solid feel underfoot and a stable platform for the flooring above.
- **Ergonomic** - Overboard 'straight' panels weigh 14kg – suitable for one man lifts.

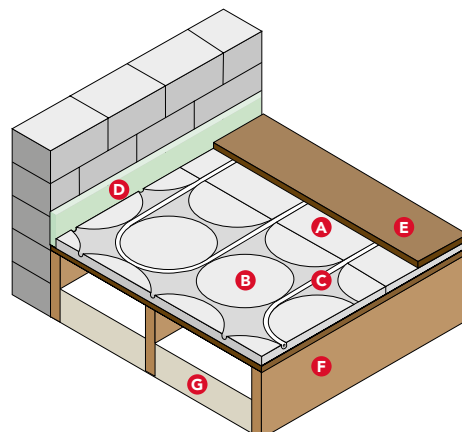
#### Overboard - Solid Floor



#### Overboard - Floating Floor



#### Overboard - Suspended Floor



|   |                               |
|---|-------------------------------|
| A | Overboard Straight            |
| B | Overboard End Return          |
| C | 12mm MLCP                     |
| D | Edge Insulation (optional)    |
| E | Floor Covering (see overleaf) |
| F | Sub-Floor                     |
| G | Insulation                    |



# FLOOR CONSTRUCTIONS

## Overboard™ Low Profile Dry Screed Board

### Technical Details

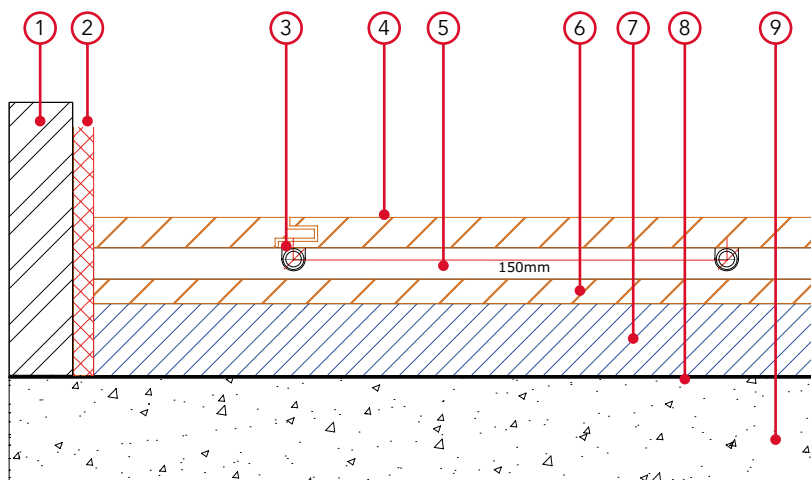
When installing underfloor heating systems ensure that all relevant health and safety legislation and local site regulations are fully adhered to at all times.

Overboard dry screed panels are used as carriers for pipes in underfloor heating systems. Due to the physical properties of Overboard, the panels allow the heat to spread effectively across the heated area, which means that the installation of heat emission plates are not required. Panels are available in two configurations, as straights and as end returns.

The majority of the heated floor area will usually be covered by the straight boards which are 1.2 x 0.6m and 18mm high. Where feed pipes are to be laid, the end returns are to be utilised and these are 0.6 x 0.6m (exactly half the size of the straight runs) and hence speed up installation, as the cutting of the boards is minimised.

|  |  |
|--|--|
| Material                                     | Gypsum and cellulose fibre   |
| Dimensions - straights                       | 1200mm x 600mm x 18mm  |
| Dimensions – end returns                     | 600mm x 600mm x 18mm   |
| Weight - straights                           | 14kg   |
| Weight – end returns                         | <7kg   |
| Density                                      | 1150kg/m <sup>3</sup>  |
| Thermal conductivity λ                       | 0.32W/mK   |
| Water vapour diffusion resistance μ          | 13   |
| Swelling after 24hrs contact with water      | <2%  |
| Reaction to fire classification (EN 13501-1) | A2   |
| Acoustic Performance*                        | Impact sound insulation EN ISO 140-6 Ln,w [dB]: 53<br>Airborne sound insulation EN ISO 140-3 Rw [dB]: 54 |

\* Tested as part of an overall timber joist floor system with 100mm mineral wool in the cavity, 22mm chip board, 10mm sound insulation board and 18mm Overboard.



**Key:**

1. Wall
2. Edge Strip (optional)
3. 12mm MLC Pipe
4. Laminate Floor Finish
5. Overboard Floor Panel
6. Supporting Layer
7. Insulation
8. DPM
9. Structural Slab

## FLOOR CONSTRUCTIONS

### Key Components

#### Maincor MLCP, PE-RT/AL/PE-RT Coils



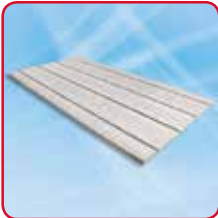
Maincor MLCP, PE-RT/AL/PE-RT, overlap welded aluminium Multi-Layer 100% barrier Composite Pipe. Available in 12mm (80 or 240m coils).

#### Mainadhesive



Mainadhesive for securing Overboard panels to the sub-floor.

#### Overboard™ Dry Screed Board - Straight



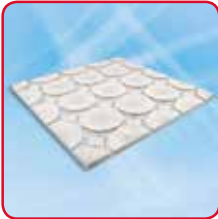
Overboard dry screed boards are used as carriers for pipes in underfloor heating systems. 18mm thick straight feed board.

#### Overboard™ Screws



30mm long screws for securing Overboard panels to timber sub-floors.

#### Overboard™ Dry Screed Board - Return



Overboard dry screed boards are used as carriers for return and feeder pipes in underfloor heating systems. 18mm thick end return board.

#### Edge Insulation (optional)



Maincor Edge Insulation is utilised around the perimeter of a room to absorb expansion and prevent thermal bridging.





# FLOOR CONSTRUCTIONS

## Overboard™ Floor Coverings

Overboard dry screed panels are suitable to accommodate a wide variety of floor coverings, including carpets, tiles, wooden and laminate flooring. Floor coverings should not be installed until 24 hours after the installation of the system.

A thin separating layer is recommended; typically either a 6mm plywood, a 6mm cement-based tile backer board, or a

decoupling membrane where tiles are used. Consideration should be given to the amount of point loading expected on the floor.

For wet areas, fully tank the entire surface of the boards to protect against damage.

### Specific recommendations for floor coverings:

|                            |  |
|----------------------------|--|
| Carpet                     | A thin separating layer will be required   |
| Tiles                      | Depending on the tile thickness but generally a thin separating layer will be required |
| Vinyl                      | A thin separating layer will be required   |
| Wooden and laminate floors | Generally lay directly on the Overboards   |

