

CELLECTA[®]

CHIPFL[®]

Tongue and Groove Underfloor Heating Chipboard

- ◻ Installation guidelines
- ◻ Proven constructions
- ◻ Technical data sheets
- ◻ Top tips



INSTALLATION GUIDE

Storage of CHiPFLO®

CHiPFLO® should be stored on a pallet in dry conditions on a dry, flat and level base.

If you are required to re-stack the **CHiPFLO**, we advise that the boards are stored on a pallet or are fully supported from the underside. Care should be taken not to damage the edges of the board whilst re-stacking.



CHiPFLO® is supplied on pallets, wrapped in temporary protection. This covering is to offer dust protection and is a temporary measure to protect the boards from the weather during the loading/unloading process, it is **not** a waterproof cover.

CHiPFLO® is an internal product and should remain dry at all times. If the product is to be temporarily stored outside appropriate measures are required to protect the boards from moisture, such as a suitable waterproof tarpaulin or sheeting.

The stacking of **CHiPFLO®** on their edges, should be avoided as this can lead to damage of the tongue and/or groove.

Prior to installation, **CHiPFLO®** should be left to acclimatise for 24 hours in the installation space.

Moisture Damage

CHiPFLO® is a P5 moisture resistant chipboard, however, chipboard when wet can swell and will not return to its original shape. Therefore great care must be taken to not allow the boards to become wet.

Should the boards become saturated during storage or in-situ, we strongly advise contacting our technical department to arrange a site survey to review the products suitability.

Attention should be paid to all health & safety regulations. For Safety Data Sheets please contact the technical department.



CELLECTA is constantly reviewing all of its guidance and best practices and therefore reserve the right to alter specifications and guidance at any time and without notice.

The information contained in this document is based on **CELLECTA's** experience and represents best practices at the time of writing.

Pre-Installation

Before commencing installation, take time to familiarise yourself with the products and installation instructions. To complete the installation you will need the following items:

- ⬡ CELLECTA **CHiPFLO** boards
- ⬡ CELLECTA **fon Adhesive**
- ⬡ CELLECTA **CEMdeck** or min 6mm plywood
- ⬡ Underfloor heating pipes (by others)
- ⬡ Tape measure
- ⬡ Hand or circular saw
- ⬡ min. 60mm screws
- ⬡ 20mm screws

Sub-Floor Preparation

Prior to installing the **CHiPFLO**, ensure that the joists are level and structurally sound. **CHiPFLO**® is designed to be installed on joists centred at 400mm, for other formations please contact the **CELLECTA** technical department.

Clear the joists to ensure any building debris is removed to allow the boards to lay flat.

TOP TIP - Utilise **CHiPFLO**® boards over the joists to give yourself a working platform, while completing installation. By marking the location of the joists on the walls, it will be easier to locate one boards are installed.

Installation of CHiPflo

Before installation of the boards, measure the area to be installed, this will enable you to check if any boards need to be trimmed before you begin. Starting in the corner furthest from the door, leave a 10mm gap against the walls, install the first **CHiPFLO**® boards perpendicular to the joists with the groove of the short and long side facing the wall. **CHiPFLO**® should be bonded to joists using **CELLECTA fon Adhesive**.

TOP TIP - Feeding the UFH pipe to and from the manifold can be laborious. Drilling a hole @ a 20 degree angle in to the **CHiPFLO** and accessing the void at an early stage is advised. It is highly recommended that the pipe is taken back to the manifold at this point to ensure enough of the coil is allowed for. This should be connected to the manifold and pinned to the wall. Liaise with the suppliers of your underfloor heating system for full details.

Run a continuous bead of **fon Adhesive** along the short tongue and in the groove of the next **CHiPFLO**® and interlock the boards together. Ensure the joints and routes are flush and there are no gaps between the boards.

At wall abutments, measure the gap from the laid **CHiPFLO**® to the wall allowing for a 10mm expansion gap between the wall and the UFH board.

Using a hand or circular saw cut the **CHiPFLO**® to the required length in a well ventilated area. Ensure suitable PPE is used when cutting the boards in accordance with the Safety Data Sheet, found on **CELLECTA**'s website.

TOP TIP - Ensure that the short edge of the **CHiPFLO**® sits on a joist, where this is not possible install noggins to support the edge of the routed chipboard.

Apply **fon Adhesive** and install the cut board to complete the row as per the above steps. Where possible, it is advised that any off cut should be no less than 200mm in width. Ensuring the cut is on the outside and that the routed channels align, use the off cut of **CHiPFLO**® to begin the next row.

Boards should be fixed to the timber joists using counter sunk 60mm screws at 400mm centres, beginning 200mm from the corner of the board, for 400mm centre joists this will result in 18 screws per board.

Install the remainder of the **CHiPFLO**® in a staggered formation ensuring all boards are glued, tightly interlocked, and that all routed channels align. Refer to your pipe layout drawing from the underfloor heating suppliers to ensure that boards match your pipe layout. Some projects may require additional routes to be inserted to the board using a hand router. In this instance, additional noggins should be installed beneath the board for additional stability.

TOP TIP - If you have to notch the joists to enable flow and return of the pipes, this must be done in accordance with Approved Document A.

Before continuing to the next step take time to check the following:

Joints and routes flush with no gaps

There a 10mm gap around the perimeter between the **CHiPFLO** & Wall

All CHiPFLO boards are glued to the joists and each other

All CHiPFLO boards are fixed using 60mm screws @ 400mm centres



Before commencing installation of the pipes, vacuum the floor to ensure that any debris is removed from the channels. In accordance with the drawing supplied install the pipes across the floor in the pattern shown, ensure that all pipes are fully pressed in to the groove of the **CHiPFLO**®.

Once installed, and in accordance with the underfloor heating suppliers guidance, pressure test the UFH system prior to installing the cover board.

Installation of CEMdeck

Running perpendicular to the **CHiPFLO**®, install the **CEMdeck** board over the entire floor, ensuring that all joints align and that there are no gaps between the boards. Using 20mm screws, mechanically fix the **CEMdeck** to the **CHiPFLO**® board below at 150mm centres, taking care not to penetrate the UFH pipes beneath.

TOP TIP - Install the cover board whilst the UFH system is still under pressure otherwise a second pressure test may be required.

Floor Finishes

All floor finishes should be installed in line with the manufacturers official guidance and the relevant British Standards.

All types of floor finishes can be installed over the **CEMdeck** board, however, **CELLECTA MP60 Primer** must be installed over the **CEMdeck** prior to any flooring that needs to be adhered.

It is not recommended that a carpet with a tog rating above 1.5 is installed over the system as this can have an adverse affect on the underfloor heating outputs, for further details or information regarding outputs, speak with the supplier of your underfloor heating pipes.

For more information contact our technical department on 01634 296677.

Need more installation help on site?

FREE services offered by **CELLECTA**:

- Technical and installation advice
- Architectural drawings and NBS specs
- U-value and imposed load calculations
- Site surveys and take-off service
- Arrange acoustic testing
- Present RIBA certified CPD's

For on the go access to information, including installation videos & technical data, download the **CELLECTA app** for smart phones and tablet devices.

CHiPFLO®

Tongue and Groove Underfloor Heating Chipboard



Product Information

CHiPflo® routed chipboard is designed to offer a low-profile, structural underfloor heating system that can be installed on new and existing timber joists. Manufactured in various route patterns for easy installation.

Product Benefits

- Structural timber floor solution
- Ideal for new build & refurbishment projects
- Low profile
- Accepts all makes of UFH pipe
- Two integrated heat diffusion foil options

Technical Data

		CHiPFLO®		
		CF	CV-50	CV-100
Product description	-	Routed T&G P5 Chipboard	Routed T&G P5 Chipboard	Routed T&G P5 Chipboard
Thickness	mm	22	22	22
Route sizes available (to suit pipe diameter)	mm	12, 15, 16	12, 15, 16	12, 15, 16
Pipe centres	mm	150, 200	150, 200	150, 200
Foil thickness	m	-	50	100
Board dimensions	mm	600 x 2400	600 x 2400	600 x 2400
Weight	kg/m ² kg/unit	14.58 21.00	14.58 21.00	14.58 21.00
Thermal conductivity	W/mK	0.12	0.12	0.12

Third Party Accreditation and Approvals



Environmental Credentials



CEMdeck®

Highly Conductive Overlay Board



Product Information

CEMdeck® low profile, non-combustible, overlay boards are a thermally efficient alternative to plywood, that when installed over routed chipboard complete a floor that is low profile, structural, and can accept a multitude of floor finishes.

Product Benefits

- Structural timber floor solution
- Ideal for new build & refurbishment projects
- Low profile
- Accepts all makes of UFH pipe
- Two integrated heat diffusion foil options

Technical Data

		CEMdeck®
Product description	-	High conductivity, overlay board for CHiPflo
Thickness	mm	6
Composition	-	Calcium Silicate Fibre Cement Board
Thermal conductivity	W/mK	0.190
Thermal resistance	m ² K/W	0.032
Board dimensions	mm	1200 x 2400
Weight	kg/m ² kg/board	7.20 20.74



Third Party Accreditation and Approvals



Environmental Credentials

