Guide to typical applications

Type of project	Predominantly new build or renovation where floor requires excavation			New build or renovation where floor level permits
Floor construction	Solid/Screed			Floating
System	Panel ✓	Rail	Staple	Floating
Schematic				
General system description	Pipe laid on insulation prior to screeding and then sits within a 65mm screed			Pipe laid in 50mm thick pre-groved insulation and within metal heat spreader plate and then overlaid with structural chipboard floor deck
Typical floor build height (including insulation)	115mm with 50mm insulation			68mm with 18mm chipboard floor deck
Compatible heat source	Boilers and heat pumps			Boilers
Floor coverings	Tiles and ceramics, vinyl, wood laminate, engineered wood, solid wood and carpet			Tiles and ceramics, vinyl, wood laminate, carpet
Heat output at mean water temperature shown below	91 W/m² @100mm pipe spacing	76W/m² @200mm pipe spacing	76W/m² @200mm pipe spacing	52W/m²
Mean water temperature	50°C	50°C	50°C	60°C
System benefits - Installer	• Simpler more accurate installation • Precise pipe positioning • Ensures minimum pipe bending radius achieved • Quick and easy to use • Can use in any size room • Allows spiral configuration and 100mm pipe centres	• Fit directly onto insulation	• Minimum fixing materials needed	• Dry system, hence no screed and drying time • Suitable for projects where access to wet screed may be difficult
System benefits - Consumer	• Ideal for ground floors, new build or extensions • Little if any change to floor construction • Can be used with low temperature heat sources • Use with all common floor coverings • Can reduce the amount of screed content needed			• System can be used immediately after installation due to no drying time required • Provides impact sound insulation when installed on intermediate floors

New build and renovation				New build / renovation / existing / single room		
Suspended (Timber and Composite Joists)				Existing Structural Floor - Solid or Timber deck		
Double heat spreader plates	Overlay™ Lite 15 ✓	Fit from below (FFB) double heat spreader	Modular Heating Panels (MHP) ✓	Overlay™ ✓	Overlay™ Lite ✓	Overlay™ Lite 15 ✓
						
Fit from above grooved metal plate suspended between joists	Pipe fits into pre-formed grooves of panels/plates, which are cut to size and fitted in between joists	Fit from below grooved metal plate fixed to floor deck between joists	Pre-configured solution including pipes, supplied in sized panels which are fitted between joists from above or below	Pipe laid in pre grooved gypsum fibre panels between structural floor and floor covering	Pipe laid in pre grooved insulated panels between structural floor and floor covering	
Within suspended floor void	Within suspended floor void	Within suspended floor void	Within suspended floor void	18mm		22mm
Boilers	Boilers and Heat Pumps	Boilers	Boilers and Heat Pumps	Boilers and Heat Pumps		
Tiles and ceramics, vinyl, wood laminate, carpet				Ceramics, solid wood, carpet. Ideal when covering needs fixing or screwing to panel	Laminate, engineered wood, carpet	Laminate, engineered wood, carpet
52W/m²	65W/m²	52W/m²	76W/m²	79 W/m²		65W/m²
60°C	50°C	60°C	50°C	50°C		
• Simple installation with traditional joists at typical 300mm to 450mm centres • Suitable for 'sprung' flooring systems as used in sports halls, etc	• Can be Used with traditional joists • System includes insulation and heat spreader layer • System can be used with low temperature heat sources	• Can be used with both traditional or composite (I beam) joists • Ability to fit even if the floor above has already been installed	• Preconfigured solution • Can be used with both traditional or composite (I beam) joists • Maximises heat efficiency • System can be used with low temperature heat sources	• Low profile system allows simple installation of UFH without significant floor height gain or excavation of existing floor • Fast response system		• Fast response system - slightly deeper profile which can be used on top of a supporting floor or as a low profile alternative to floating floor • Uses 15mm pipe so uses fewer circuits • Suitable for larger areas or whole house solutions
• Standard suspended floor detail normally associated with intermediate floor systems	• System compatible with heat pumps or allows boilers to run at lower temperatures for optimum efficiency	• Allows installation of heating without disturbance to upper floor e.g cellars or where upper floor coverings are in situ	• System compatible with heat pumps or allows boilers to run at lower temperatures for optimum efficiency	• Ideal for single room applications • Low profile option for new build • Fast response systems		