CASE STUDY
Dry Underfloor Heating

Installing underfloor heating can be a disruptive process in a retrofit situation often requiring a new floor and insulation with a wet screed covering. However, a dry underfloor heating system avoids this and can often use an existing floor structure without any alterations required. Insulation levels are also improved as part of the process.

In this case study a 1980s house was extended and renovated in Co. Wicklow, Ireland. The existing concrete floor had no insulation as was typical of houses built at that time. The existing heating system was an aging Oil boiler heating steel radiators. This was to be upgraded to a high efficiency gas boiler heating underfloor heating downstairs and low temperature radiators upstairs.

Prineto underfloor heating insulated boards were used to provide an insulation layer for the floor. This is a 30mm (or 50mm) thick insulated board laid on an existing concrete floor to provide an insulation layer where there was previously none. Prineto underfloor heating pipes are then laid using pre-cut grooves in the insulated board.

A dry screed board was laid on top of the underfloor heating system to provide structural strength to the floor. No wet screed with associated drying time is required with this system. An 8mm laminate board floor finish was then installed over a 5mm underlay.
SYSTEM SUMMARY:

- Floor Area: 60m²
- Underfloor heating: Prineto 30mm insulated board system
- Low Temperature radiators upstairs
- Natural Gas heating
- Floor finish: 8mm laminate board