

When designing a Screedflo dB floor, the designer needs to take account of two phases; short term construction and long term.

The short term construction phase only lasts for 48 hours from the start of the pouring of the screed. This is due to the Screedflo screed imposing a load sufficient to cause deflection in the floor, while being liquid enough to run into the depression caused by this deflection. Consequently, the floor structure must be designed to deflect no more than 5mm or  $L/333$ mm (whichever is the smaller) for the first 48 hours.

Once the screed has cured, which will typically be 48 hours after pouring, normal NHBC or Building Regulations design criteria apply.

## Loading applied

The loading applied shall follow BS6399 or BSEN1991.

## Design loads

Material	Loads (kN/m <sup>2</sup> )
Screedflo screed (dry)	0.88
Screedflo screed (wet)	0.99
Screedflo dBoard & dBfoam	0.075
OSB/3 18mm	0.11
Joists	See manufacturers technical literature
Plasterboard	0.23

## Design performance criteria limits

	Standard 14mm	Standard 12mm
Uinst	$L/333$ or 14mm	$L/333$ or 12mm
Ufin	$L/200$	$L/200$
Short term construction loads (Pour +24hrs)	$L/333$ or 5mm (6mm for PSI)	$L/333$ or 5mm (6mm for PSI)

## Where

<b>L</b>	Engineering span between supports.
<b>Uinst</b>	Instantaneous deflection under live, partition and dead load.
<b>Ufin</b>	Final deflection under live, partition and dead load.
<b>Dead load only</b>	In this load case the dead load of the floor is considered as the load of the joist, the structural deck, the dBoard & dBfoam and the slip membrane. The dead load of the screed at 45mm (0.99kN/m <sup>2</sup> ) is considered as live load.
<b>Standard 14mm</b>	Standard deflection criteria conforming with BS5268.
<b>Standard 12mm</b>	Standard deflection criteria conforming with BS5268 and NHBC Technical standard.

## Screedflo dB has been certified for use with the following deck materials:

### Joists at 400mm or less centres

- 15mm OSB/3 to BSEN 13986 (CE 2+)
- 18mm Chipboard P5 to BSEN 13986 (CE 2+)
- 15mm structural Plywood to BSEN 13986(CE 2+) and BS5268-2:2002

### Joists at 401mm to 600mm centres

- 18mm OSB/3 to BSEN 13986 (CE 2+)
- 22mm Chipboard P5 to BSEN 13986 (CE 2+)
- 18mm structural Plywood to BSEN 13986 (CE 2+) and BS5268-2:2002

