



GYPDECK Structural

Product Information & Technical Data Sheet

Resonates **GYPDECK Structural** is a high mass, load bearing gypsum fibre floor panel. It is suitable to spanning joists, pedestals and acoustic cradle and batten systems.

The low thermal resistance of the **GYPDECK Structural** boards also makes them hugely effective when used in conjunction with underfloor heating applications.

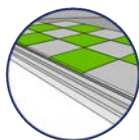
The boards are very dimensionally stable and do not suffer from contraction and expansion issues normally associated with timber based structural flooring. They are also ideal for laying brittle floor finishes directly over, such as porcelain or ceramic tiles (Brinell >40N/mm²).

Technical Data	18	25
Mass per m ²	27 - 29kg	37 - 40kg
Maximum joist centres	400mm	600mm
Pull off bond strength	>1.0N/mm ²	>1.0N/mm ²
Expansion/Shrinkage	Changing air humidity at 20°C x 30% 0.6mm/m	
Surface water absorption	(EN20535) <300g/m ²	(EN20535) <300g/m ²
Value of vapour diffusion resistance	μ30	μ30
Expansion of thickness after 24hours in water	0.5mm	0.5mm
Expansion/shrinkage by rise & fall temperature	0.02mm/(mk)	0.02mm/(mk)
Conductivity of heat	0.44 AR W/(mk)	0.44 AR W/(mk)
Reaction to fire classification	(EN 13501-1) A1	(EN 13501-1) A1
Working Load		
300x300mm centres	2.7kN	4.5kN
400x400mm centres	2.5kN	4.0kN
600x600mm centres	n/a	3.0kN

Key Benefits



Excellent impact and airborne sound reduction



High density boards accept ceramic and porcelain floors directly without a decoupling mat

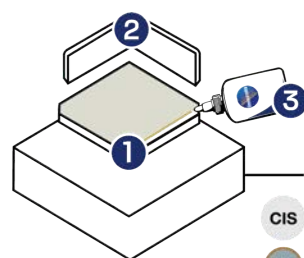


Dry system reduces build times.
Does not burn when exposed to fire (non-combustible - A1 fire rating)



System Components

1. Resonate **GYPDECK Structural** floor panel
2. **ResoEdge** flanking strip
3. Resonate **GYPDECK Adhesive**



Sub-floor options



Dimensions

Panel Dimensions

600mm (W)
1200mm (L)
18mm or 25mm (H)

Panel m²

0.72m² per panel

Panels Per Pallet

18 = 50 panels
25 = 35 panels

Density

1600 kg/m³

Pallet Dimensions

700mm (W)
1200mm (L)
1050mm (H)

Pallet Weight

18 = 1050kg
25 = 1025kg

Panel Weight

18 = 21kg per panel
25 = 29kg per Panel

Robust Detail Compliant

E-FC-1 (FFT 2)

E-FC-2 (FFT 2)

E-FS-1 (FFT 2)



Product Applications and Typical Acoustic Performances

Concrete In-situ Floor

CIS



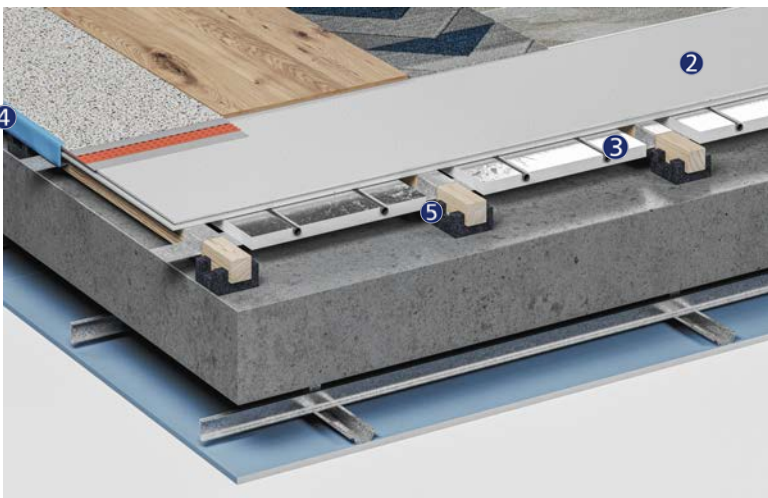
1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate **GYPDECK** Structural floor panel
3. **ResoThermEdge** flanking strip
4. **ResoCradle**'s and timber battens
5. 200mm Reinforced insitu concrete slab
6. MF Ceiling (min 100mm void)
7. 1 x 9.5mm acoustic plasterboard

Airborne Sound Performance DnT,w + Ctr	54dB
Impact Sound Performance LnT,W	48dB
Impact Noise Improvement ΔLw	28dB



Concrete In-situ Floor

CIS



1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate **GYPDECK** Structural floor panel
3. UFH pipes laid in **ResoThermXPS** insulation
4. **ResoThermEdge** flanking strip
5. **ResoCradle**'s and timber battens
6. 200mm Reinforced insitu concrete slab
7. MF Ceiling (min 100mm void)
8. 1 x 9.5mm acoustic plasterboard

Airborne Sound Performance DnT,w + Ctr	54dB
Impact Sound Performance LnT,W	48dB
Impact Noise Improvement ΔLw	28dB



Metal Web Timber Joisted Floor

MW



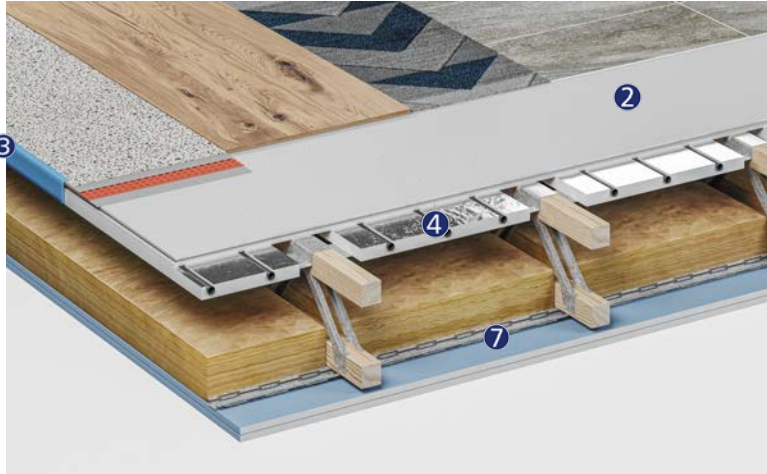
1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate **GYPDECK** Structural floor panel
3. **ResoThermEdge** flanking strip
4. 225mm (min) metal web timber joist
5. 100mm 45kg/m³ mineral wool
6. 30mm **ResoBar** resilient bars
7. 2 x 15mm acoustic plasterboard



Product Applications and Typical Acoustic Performances

Metal Web Timber Joisted Floor

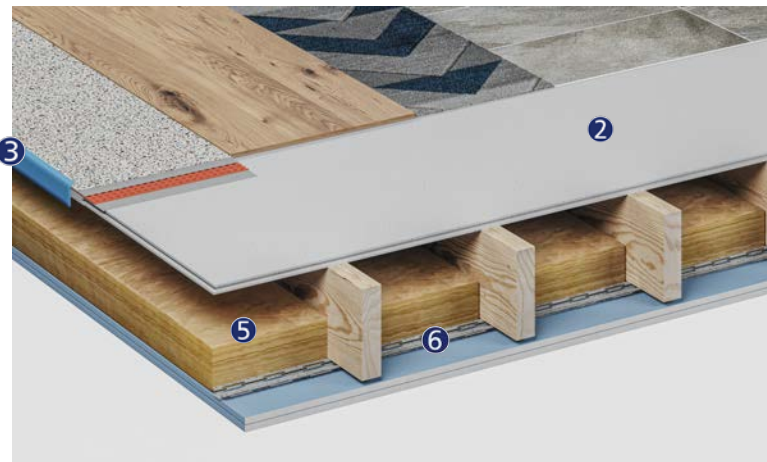
MW



1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate GYPDECK Structural floor panel
3. UFH pipes laid in ResoThermXPS[®] insulation
4. ResoThermEdge flanking strip
5. 225mm (min) metal web timber joist
6. 100mm 45kg/m³ mineral wool
7. 30mm ResoBar resilient bars
8. 2 x 15mm acoustic plasterboard

Solid Timber Joisted Floor

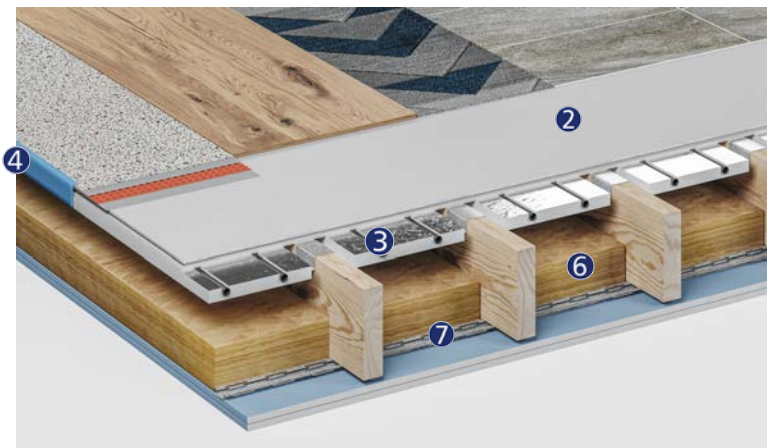
STJ



1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate GYPDECK Structural
3. ResoThermEdge flanking strip
4. Timber floor joists (max 600mm centres)
5. ResoQuilt 50mm soundproofing wool
6. 30mm ResoBar resilient bars
7. 2 x 15mm acoustic plasterboard

Solid Timber Joisted Floor

STJ



1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. GYPDECK Structural Cement Fibre coverboards
3. Resonate ResoThermXPS[®]
4. ResoThermEdge flanking strip
5. Timber floor joists (max 600mm centres)
6. ResoQuilt 50mm soundproofing wool
7. 30mm ResoBar resilient bars
8. 2 x 15mm acoustic plasterboard