

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.

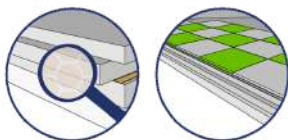
The boards are very dimensionally stable and do not suffer from contraction and expansion issues normally associated with timber based structural flooring. They are also ideal for laying brittle floor finishes directly over, such as porcelain or ceramic tiles (Brinell >40N/mm²).

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

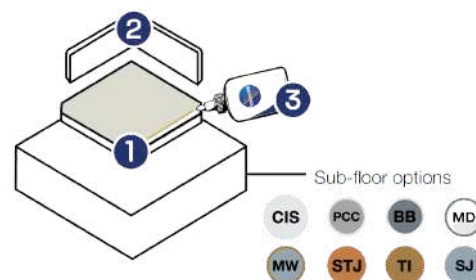


Dry system reduces build times. Does not burn when exposed to fire (non-combustible - A1 fire rating)



System Components

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



Dimensions

Panel Dimensions	Pallet Dimensions
600mm (W)	700mm (W)
1200mm (L)	1200mm (L)
18mm or 25mm (H)	1050mm (H)

Panel m ²	Pallet Weight
0.72m ² per panel	18 = 1050kg
	25 = 1025kg

Panels Per Pallet	Panel Weight
18 = 50 panels	18 = 21kg per panel
25 = 35 panels	25 = 29kg per Panel

Density
1600 kg/m³

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

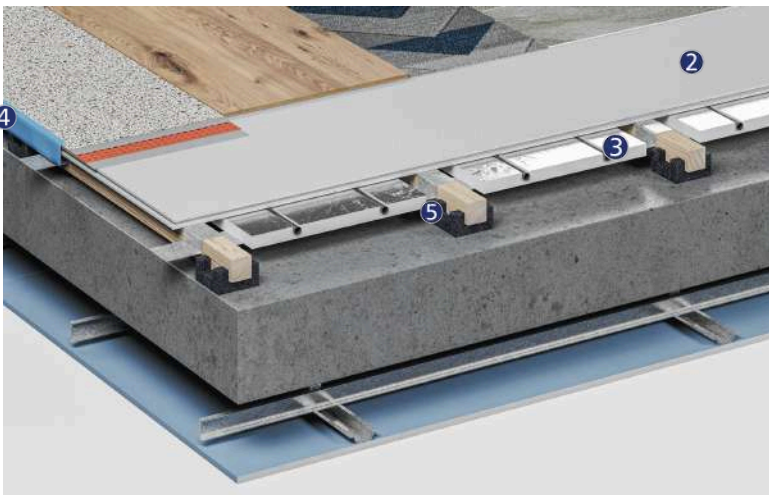


1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate GYPDECK Structural floor panel
3. ResoThermEdge flanking strip
4. ResoCradle's and timber battens
5. 200mm Reinforced insitu concrete slab
6. MF Ceiling (min 100mm void)
7. 1 x 9.5mm acoustic plasterboard

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



Concrete In-situ Floor CIS

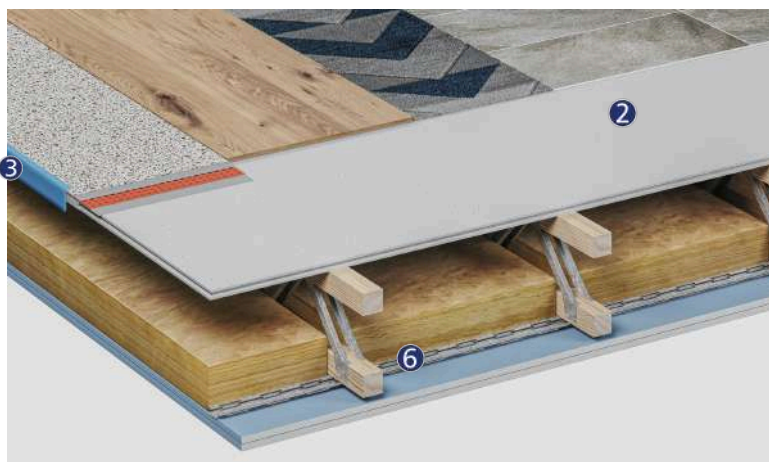


1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate GYPDECK Structural floor panel
3. UFH pipes laid in ResoThermXPS insulation
4. ResoThermEdge flanking strip
5. ResoCradle's and timber battens
6. 200mm Reinforced insitu concrete slab
7. MF Ceiling (min 100mm void)
8. 1 x 9.5mm acoustic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

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



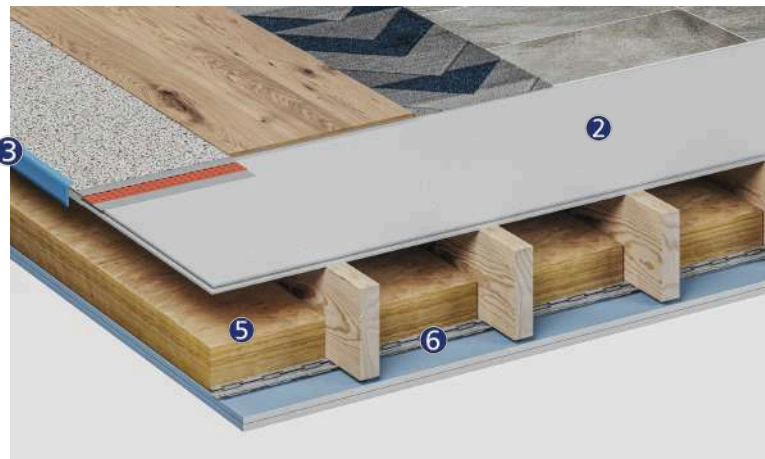
Product Applications and Typical Acoustic Performances

Metal Web Timber Joisted Floor MW



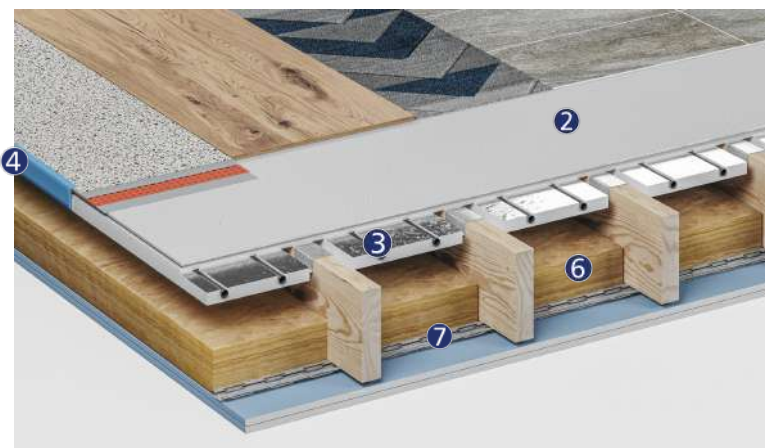
1. Ceramic Tiles / Timber flooring / Carpet / Vinyl
2. Resonate GYPDECK Structural floor panel
3. UFH pipes laid in ResoThermXPS® insulation
4. ResoThermEdge flanking strip
5. 225mm (min) metal web timber joist
6. 100mm 45kg/m³ mineral wool
7. 30mm ResoBar resilient bars
8. 2 x 15mm acoustic plasterboard

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