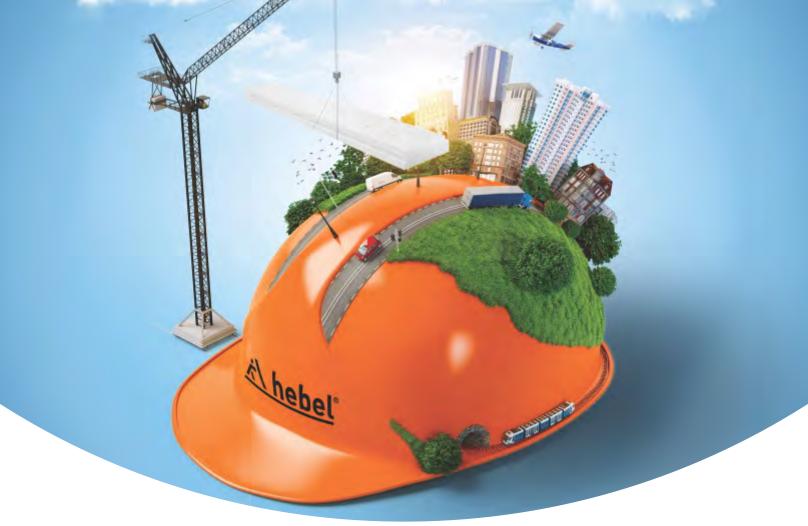


Technical Sheet and Installation Guide
Hebel® Power Floor<sup>TM</sup>
Autoclaved Aerated Concrete







# About Hebel®

Hebel® is a registered trademark of Xella Group, a German technology. In the USA, we are now part of Bexel International Group, manufacturing Autoclaved Aerated Concrete products, following the highest quality standards of the industry. Hebel® offers the most efficient solution in construction systems, more than 80 years in the market support us. We have been present in America since 1994.

Hebel® is distinguish by being a high-quality, innovative option that combines various properties in a single material. The benefits are reflected from the construction phase, it is up to 5 times lighter than traditional concrete, and has a significant impact on reducing construction time, as well as generating great savings in steel, concrete and labor.

We promote sustainability with high energy efficiency in all types of buildings.

Our systems provide high thermal performance, maximum fire resistance, acoustic insulation and resistance to humidity.

Hebel® is committed to providing to the United States with environmentally responsible building solutions that conserve material an energy usage. We are members of the Green Building Council

Hebel® Autoclaved Aerated Concrete offers to contractors with strong, easy-to-install blocks and reinforced panels that are one-third the weight of traditional concrete and replace traditional multi step construction processes.

Our building systems offer low insurance and maintenance cost to the building owner. A wide range of projects can benefit from Hebel® blocks and reinforced panels, including those in the commercial, educational, hospitality, industrial, institutional, governmental and residential segments.

Due to the AAC qualities, Hebel® has national and international recognized certifications, their manufacturing process is carefully monitored at all stages, in order to guarantee the best quality for our customers.

Its properties take any project to a higher category, managing to build a better quality life, comfort and savings for a lifetime. At Hebel® we care to offer a full experience with a 360 service for each project specification.

The Hebel® Plant is located in Nuevo León, México and its USA offices are located in San Antonio, TX., from where we serve the USA market.

# Aerated Concrete Hebel<sup>®</sup>: Unique properties in a single material.

#### **Benefits**



#### Thermal Insulation

Buildings constructed of HEBEL AAC provide substantial energy savings in both hot and cold climates. The unique closed cellular structure and the thermal mass contribute to a high R-value and air-tightness which reduce heating and cooling costs and improve indoor air quality. Buildings have seen savings on air conditioning up to 35% by using HEBEL AAC.



#### Structural Performance

Resists wind pressures. High impact resistance.



#### Fire Resistant

We are certified by Underwriters Laboratories (UL) with the maximum fire-rating classification. Our systems withstand fire exposure up to 4 hours, maintaining their structural integrity and DO NOT emit toxic fumes even under intense heat.



#### Acoustic Insulation

Provides exceptional acoustic insulation. Its porous structure and high surface mass, coupled with its ability to dampen mechanical vibration energy, greatly reduces sound transmission from exterior - interior and room-to-room.

A COLUMN TO SERVICE DE LA COLUMN DE LA COLUM



#### Resistance to humidity

**Protects against moisture.** It allows the passage of water vapor, reducing condensation.



#### **Green Building**

- · Recyclable, inert & non-toxic
- Energy saving
- Durable
- LEED credits



#### Easy treatment

Can be **easily cut, drilled and grooved** with manual or power tools.



#### Lightweight

Its lightweight nature allows a faster and more efficient construction.



#### Pest resistance

Not a food source for termites or vermin and no cavity construction. Eliminates the chance of harbouring pests.

# **Physical Properties**

The physical properties of HEBEL Autoclaved Aerated Concrete are unique to any other building material. Properties such as thermal insulation and fire resistance cannot be met by another product alone.

- Speed of Construction
- Thermal Insulation & Energy Savings
- Superior Fire Resistance

- Sustainable
- Relatively high strength for a low density
- Workability
- Acoustic Performance
- Precision

## This product meets Standards and Evaluation issued by:





ACI 530-13 ACI 523.4-R09





ASTM C 1693-11 ASTM C 1660-09



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# Hebel<sup>®</sup> Power Floor<sup>™</sup> **Autoclaved Aerated Concrete**

#### Uses and applications

Hebel® PowerFloor™ is a lightweight autoclaved aerated concrete (Hebel AAC) panel that can be fixed to timber or steel joists. It provides the feel of a rigid concrete floor but with the advantage of providing an instant working surface, along with acoustic and thermal benefits.

### **Construction Advantages**

- No topping required.
- Rapid installation.
- Fire resistant.
- Superior Acoustic insulation.
- Accuracy of manufactured panels.
- No pre-drilling.
- Excellent load carrying capacity.
- Smooth finish surface.
- Lightweight panels.
- Non Toxic.
- Pest and rot resistant.

This product is friendly to the environment, ecological, non-toxic and sustainable; and also grants LEED points.







#### Application:

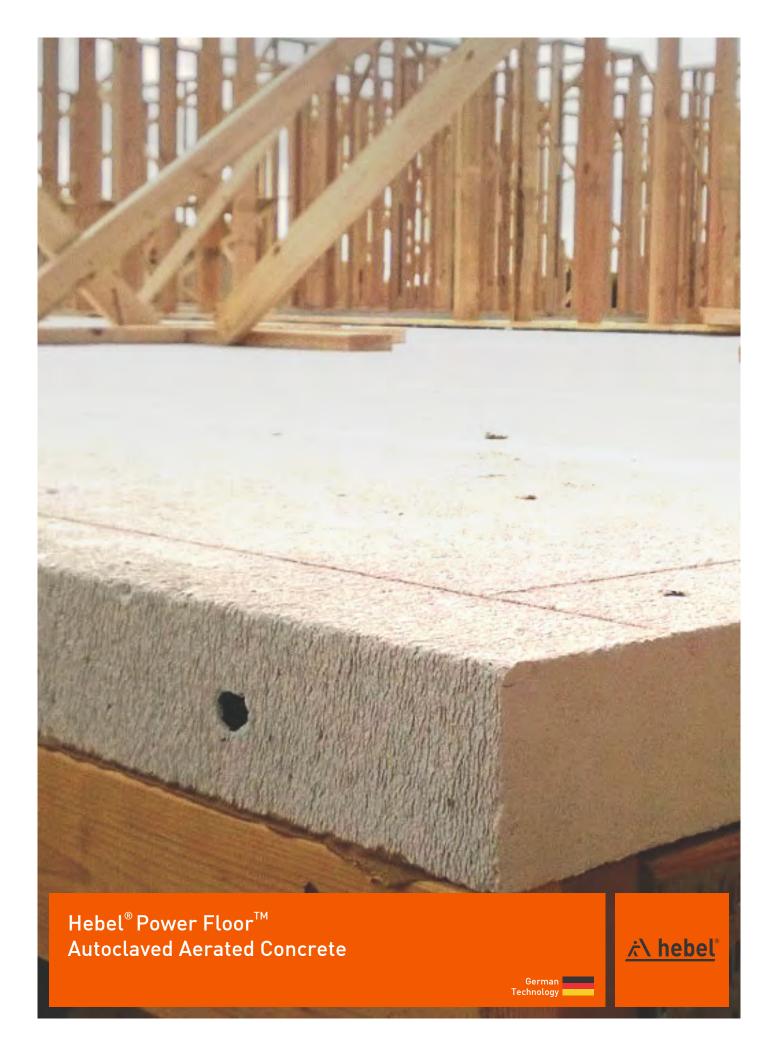
- Hospitality
- Assisted Living
- Multifamily

#### Certifications:

UL, IAPMO, TDI.

#### More benefits of Hebel® Power Floor™

- Fire resistance.
- Strength and security.
- Acoustic performance.
- Thermal performance.
- Not Mildew.
- Low maintenance.
- Friendly to the environment and
- Grants LEED points.
- Solid concrete floor.





# 1 Technical Sheet

#### 1.1 Hebel®Power Floor™

#### **General Features**

Hebel® Power Floor™ is an Autoclaved Aerated Concrete (AAC) and steel reinforced element. The steel wire reinforcement is Grade 70 and it's covered with an anti-corrosive coating.  $Hebel^{\otimes}$  Power  $Floor^{\mathsf{TM}}$  can be cut and drilled with conventional tools.

Hebel<sup>®</sup> Power Floor<sup>™</sup> is lightweight, fire resistant\*, water penetration resistant\*\*, pest resistant, fast and easy to install, versatile and affordable.

#### Uses

 $\mathsf{Hebel}^{\scriptscriptstyle{(\!0\!)}} \mathsf{Power}\,\mathsf{Floor}^{\scriptscriptstyle{\mathsf{TM}}}\,\mathsf{can}\,\mathsf{be}\,\mathsf{used}\,\mathsf{as}$ flooring for metal or wood frame construction. Appropriate for residential, hotels, commercial and industrial buildings.

<sup>\*</sup> Under ASTM E119 / \*\* ASTM E514

Dimensions				
Thickness <sup>(1)(3)</sup>	3 in.			
Length <sup>(2)</sup>	6, 6.67 and 8 ft.			
Width	24 in.			

 $<sup>^{[1]}</sup>$  Tolerance  $\pm 1/8\text{"},~^{[2]}$  Tolerance  $3/16\text{"},^{[3]}\text{Nominal}.$ Manufactured according to ASTM C1452, ASTMC1693

Characteristic	Unit	AAC-4 Class
Minimum Compressive Strength (f´aac)	lb/in²	580
Design Weight <sup>(1)</sup>	lb/ft³	37
Nominal Destiny	lb/ft³	31
Module of Elasticity	lb/in²	295,000
Drying Shrinkage	in/ft	<0.02
Thermal Conductivity	1/°F	4.4 x 10 <sup>-6</sup>

<sup>&</sup>lt;sup>(1)</sup>Values consider material 's moisture contect.

Table 1: Physical and design properties.

Design Weight					
Thick	(ness (1)	Length	Design \	Weight (2)	Area per Piece
in	in <sup>(*)</sup>	ft	lb/ft²	lb/piece	ft²
3	2.953	6	9.22	110.6	12
3	2.953	6.67	9.22	122.7	13.3
3	2.953	8	9.22	147.7	16

<sup>\*</sup> Exact dimension

Table 2: Hebel® Power Floor™ design weight.

Acustic Properties					
Assembly		STC	IIC	Report Number	
Hebel® Power Floor™ Panel 3" (without finishes)		36	-	STORK 23816	
Carpet Screw fixing to suit joint type	Screw to	toing to		Florida advisión	
Wood or Steel Trusses (AF O. C.)	Trusses	of Steel		1	
SRT Type C Coppeant Board (12" Soney Spatishing ) Habel	SW Type C Gy (12" Screw	Hobel	RC Deluxe (16" O	HI3 Poorglass bet insulation	
Wood Framing					
Carpet & pad and 3" Hebel Power Floor over 18" wood trusses, F Batt Insulation and $5/8$ " Type "C" Gypsum board directly attached wood framing.		48	68	I8359.01-113-11-R0	
Carpet & pad and 3" Hebel Power Floor over 18" wood trusses, F Batt Insulation and 5/8" Type "C" Gypsum board attached to wood framing with Resilient Channels (RC).		59	78	18359.02-113-11-R0	
Wood flooring & underlayer and 3" Hebel Power Floor over 18" v trusses, R-13 Batt Insulation and 5/8" Type "C" Gypsum board at to wood framing with Resilient Channels (RC).		59	56	I8359.03-113-11-R0	
Ceramic tile & adhesive and 3" Hebel Power Floor over 18" wood trusses, R-13 Batt Insulation and 5/8" Type "C" Gypsum board att to wood framing with Resilient Channels (RC).		60	48	18359.04-113-11-R0	
Metal Framing					
Carpet & pad and 3" Hebel Power Floor over 12" Open web steel trusses, R-13 Batt Insulation and 5/8" Type "C" Gypsum board att to wood framing with Resilient Channels (RC).		57	77	I8360.01-113-11-R0	
Wood flooring & underlayer and 3" Hebel Power Floor over 12" C web steel trusses, R-13 Batt Insulation and 5/8" Type "C" Gypsun board attached to wood framing with Resilient Channels (RC).		58	53	I8360.02-113-11-R0	
Ceramic tile & adhesive and 3" Hebel Power Floor over 12" Oper steel trusses, R-13 Batt Insulation and 5/8" Type "C" Gypsum boa attached to wood framing with Resilient Channels (RC).		59	47	I8360.03-113-11-R0	

Testing performed in accordance with ASTM E-90 Standard Method for Laboratory Measurement of Airborne Sound. Transmission Loss Building Partitions and ASTM E492 Standard Method for Laboratory Measurement of Impact Sound Transmission. Through Floor-Ceiling Assemblies Using Tapping Machines.

Tabla 3: Hebel® Power Floor™ Acoustic Properties



<sup>&</sup>lt;sup>(2)</sup>Units: BTU=british thermal unit, in=inches, ft<sup>2</sup> =square feet, h=hour, 0 F=Fahrenheit

<sup>&</sup>lt;sup>(1)</sup> Nominal dimension. <sup>(2)</sup> Values consider material's moisture content. <sup>(3)</sup> Standard width 24 in

# 2 Design Considerations.

#### 2.1 General Considerations.

- Hebel® Power Floor<sup>TM</sup> shall be designed in order to comply with safely and serviceability requirements as specified by ACI 523.4R-09.
- Supporting joists shall be designed in accordance with the code to support design loads, incluiding the self-weight of the floor panels.
- Hebel® Power Floor™ Panels shall be installed over wood or steel joists or trusses spaced a maximum of 24 inches on-center (610 mm).

Joists and trusses shall be designed in accordance with the code to support the loads, including the self-weight of the floor panels. The nominally 3-inch thick panels weight approximately 9 psf. The maximum allowable uniform load shall not exceed 305 psf when supported a maximum of 24-inches (610 mm) on-center. See Table 4 of this report for maximum allowable diaphragm shear loads.

- Control joints are placed to prevent random cracking due to thermal expansion, contraction and structural movements.
- The width of the control joint should be 5/8" for metal frame or 1" for wood frame, and should be sealed with backer rod and caulking.

	Shear Values	
	Maximum Diaphragm Shear (plf)	Joist Requirements, minimum
Wood systems - parrallel to joists	392	2x6 nominal DF lumber spaced 24" o.c.,
Wood systems - perpendicular to joists	258	minimum specific gravity of 0.50
Steel systems - parrallel to joists	430	1.5" x 5.5" steel joists, minimum 22 gage
Steel systems - perpendicular to joists	343	(0.028-inch), spaced 24" o.c.

SI conversions: 1 inch = 25.4 mm; 1 plf = 1.488 kg/m

Table 4. Hebel® Power Floor ™ allowable Diaphragm Shear Values.



# 3 Installation Guide.

#### 3.1 General Installation **Guidelines**

Previous Installing Hebel® Power Floor™

#### 1. Check the Structure:

- Verify the complete and proper installation of all beams, trusses, lintels, bracing, reinforcing elements and connectors.
- Check plumb and alignment of joist or rafter supports.
- Joist (wood or metal) should not be spaced at more than 24 inches o.c. (please contact Litecret, Inc. technical department otherwise).

#### 2. Check Hebel® Power Floor™ Pallets:

- Carefully unload the Hebel pallets using an all terrain fork-lift. Flat surfaces are required for unloading and storage areas.
- Place Hebel® Power Floor™ pallets close to their final position around the building and over wood blocks (panels must not be in contact with ground).
- Check Hebel® Power Floor™ quantity.

#### 3. Hebel® Power Floor™:

- Shall be installed in accordance with this guide and the approved construction plans. A copy of the plans and this guide shall be available at the jobsite at all times during installation.
- Typical installation details are illustrated in figures 3 of this guide. These typical details are intended for general guidance only and must be substantiated for approval by the code official.

■ Hebel® Power Floor™ Panels shall be protected from moisture and abrasion by application of an approved topping.

#### 4 Fasteners

■ Fasteners shall be SESintec's #12 DEKFAST metal screws or similar. For installation to wood joists screws shall be minimum 4½-inch (114 mm) long with minimum 3½inch (88.9 mm) long threaded ends. Fasteners shall penetrate a minimum of 1½-inch (38 mm) into wood framing. Wood framing shall be of a species with a minimum SG of 0.50 or greater. For use with steel joists screws shall penetrate a minimum of 3/4-inch (19 mm) through steel framing. See Table 5 of this report for allowable shear load per fastener.

■ Fasteners shall be spaced nominally 8-inches (203 mm) oncenter along each joist line with edge distances as shown in Figures 3 and 4 of this report.

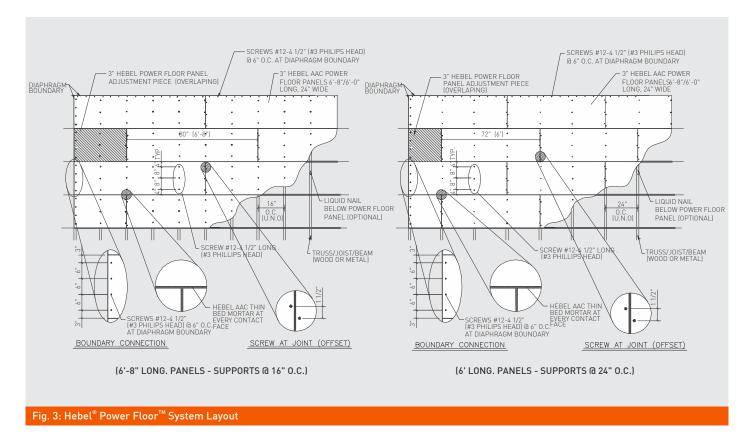
#### 5. Miscellaneous:

■ Hebel® Power Floor™ Panels shall be installed over wood or steel floor joists or trusses spaced a maximum of 24-inches (610 mm) on-center. Panels shall be installed in a running bond pattern with joints staggered at least 24inches (610 mm) as shown in Figure 3 of this report.

- Construction adhesive shall be installed on each joist prior to placement of the Hebel® Power Floor, and panels shall be fastened to the joists or trusses with fasteners as described in Section 4.3 of this report. Joints between AAC panels shall be filled with Hebel® Thin Bed mortar prior to placement of adjacent panels.
- Bond construction adhesive (liquid nail or similar) below power floor in wood joist is optional and helps to prevent squeaking.

Fastener					
Material Stud	Shear (lb)	Pull-through (lb)	Pull-out (lb)		
Wood	150	108	154		
Steel	151	108	171		

SI conversions: 1 lbs = 4.448 N, Screw #12-41/2 Long. Table 5. Allowable load per Fastener.

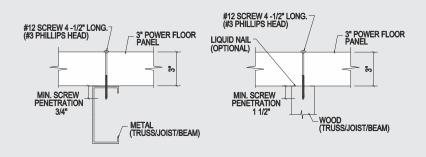


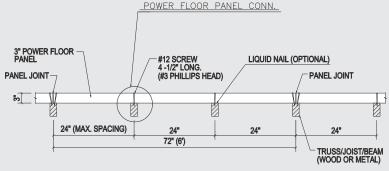
#### AAC ADHESIVE AT JOINT AAC ADHESIVE AT JOINT #12 SCREW 4 -1/2" LONG. (#3 PHILLIPS HEAD) 3" POWER FLOOR PANEL #12 SCREW 4 -1/2" LONG. (#3 PHILLIPS HEAD) LIQUID NAIL (OPTIONAL) 3" POWER FLOOR PANEL MIN. SCREW PENETRATION 3/4" SCREW DIAGONAL PENETRATION SCREW DIAGONAL PENETRATION METAL (TRUSS/JOIST/BEAM) WOOD (TRUSS/JOIST/BEAM) POWER FLOOR PANEL JOINT #12 SCREW 3" POWER FLOOR PANEL 4 -1/2" LONG. (#3 PHILLIPS HEAD)

(6'-8" LONG. PANELS - SUPPORTS @ 16" O.C.)

80" (6'-8")

LIQUID NAIL (OPTIONAL)





(6' LONG. PANELS - SUPPORTS @ 24" O.C.)

Fig. 4: Typical Hebel® Power Floor™ connections.

#### 6. Check the Utilities:

PANEL JOINT

(MAX. SPACING)

- Make sure that water pipes have been installed properly below the floor level and not on the external face of the floor frame.
- Check for electrical conduits. phone lines, TV antenna, cable, dryer ventilation, etc.

PANEL JOINT

TRUSS/JOIST/BEAM (WOOD OR METAL)

16"

to the

#### 7. Application Requirements:

#### Tools:

- Plastic Bucket
- Masonry Level
- Rubber Mallet (24 oz min)
- Stirrer for Power Drill
- Spatula
- Chalk Line
- Finishing Trowel
- Sanding Float
- Masonry Scrub Brush
- Tape Measure

#### Equipment:

- Circular Saw (7¼" min) with diamond blade for 2" Hebel® Power Floor
- Circular Saw (10¼" min) with diamond cutting blade for 3" Hebel® Power Floor™.
- D-Handle Drill ½" for fastening Hebel® Power Floor.
- Power Drill ½" (Low RPM) for Stirrer.
- Screwdriving Bits (Phillips).
- Clamps.
- Safety Gear (goggles, dust mask, gloves, apron, hard hat, etc.).

#### Additional Material:

- Screws #12 (see Table 7 for specifications).
- Hebel<sup>®</sup> Thin Bed Mortar and Hebel® Repair Mortar.
- Anticorrosive Paint.

Note: Technical support is available for builders and architects. Contact Litecrete, Inc. for

more information.



### 3.2 Hebel® Power Floor™ Installation Sequence

#### 1. Preparation of framing for Hebel® Power Floor<sup>™</sup> panel installation.

Floor framing must be complete and within level tolerances, provide setout chalk lines as required, a temporary installation platform can be used where necessary, ensure floor framing has adequate strength to support Hebel® Power Floor™ bundles and position them.

#### 2. Hebel® Power Floor™ Panel Installation

Border panels are to be installed first in a stretcher bond pattern with a minimum overlap of one joist space and not less than 16". Use lifting handles or trolley to move the panels to installation area, apply a 3/16" min. bead of bond construction adhesive (or equivalent) to top of joists in accordance with manufacturer's instructions, and apply Hebel adhesive to panel edges.

Panels must be installed with a minimal horizontal sliding on the joints to ensure a good bond. Ensureall joints are tight and that adhesive makes full contact along all joints.

Screw fix panel to the joists as required. Repeat process, removing excess Hebel® Adhesive. Screws into ioists are driven without drilling of panels and excessive adhesive should be removed immediately. Screw holes are filled with AAC Adhesive and any chips on panel edges should be filled with AAC adhesive or AAC Patching Mortar.

#### 3. Penetrating Detailing

Install blocking to support Hebel® Power Floor<sup>™</sup> Panel at chases or holes.

Penetrations and Notches in floor panels Hebel<sup>®</sup> PowerFloor™ can accommodate a maximum circular penetration of 4" diameter without compromising the panel strength. Where multiple holes are required, these should all be in a straight line parallel to the long panel edge. The maximum width of notching in a panel

is a guarter of the panel width and no notching is allowed in panels less than 16" wide. All holes in floors for pipes/services, etc. should have full blocking to support panels around openings and movement joints should be installed around all services.

Fitted Flooring is placed between the framed walls, after the walls are erected. Fitted floors are required where the bearing stress on the floor panels would exceed 340 psi, either on top of the joists or blocking under the panels, or under the bottom plates of partitions. Fitted floor panels should finish with a 3/8" minimum gap between the panel and the wall framing.

Platform flooring is where the floor is laid before the wall partitions are erected, and all wall frames sit on top of the Hebel<sup>®</sup> PowerFloor™. It can only be used where bearing stresses are less than 340 psi. To give the equivalent holding down capacity required by structural specifications, bottom plates should be fastened

With #12-41/2" Philips head screws at maximum 8" centers. All bracing walls on platform floors require bottom plates to be fastened with bolts through the Hebel® PowerFloor™ to blocking on the under-side as shown in Fig. 7, 12 and

#### 4. Finishes

Sweep the floor surface to remove debris and loose particles, fill joints and screw holes with Hebel® Adhesive as required and make sure the perimeter is not chepped.

Install floor covering for Hebel® Power Floor<sup>™</sup> System in accordance with manufacturer's specifications.

#### Wet Areas

All wet areas require the water-proof membrane over the Hebel® PowerFloor™. This includes exterior decks, tiled areas in bathrooms, laundries etc.

Note: Ensure panel moisture content is within limits outlined by the floor covering manufacturer.



"Please refer to our SDS for further information":



Caution: Use safety gear: Hard hat, gloves, dust mask and goggles to avoid excessive inhalation of dust and protection of the eyes when handling Hebel® Power Floor™

#### 5. Surface Patching

Use Hebel® Repair Mortar to patch chips, breaks and other imperfections on the external surface of the Hebel® Power Floor™

Hebel® Repair Mortar is mixed in a plastic bucket, adding water (see instructions on the bag) using a stirrer and a power drill or by manual means (depending of quantity to be used). It is applied using a spatula.

#### 6. Control Joints

Control joints should divide the floor panels into separate floor diaphragms of a maximum of 20 ft long in either direction. See Figures 6 and 8 for typical control joint details. Control joint locations should be as follows:

- At changes in panel and joist orientation.
- At load bearing bracing walls to ensure that the floor diaphragm is continuous between bracing walls.
- Over support walls or beams.
- At 20 ft maximum spacing.

#### 3.3 Cutting Hebel® Power Floor<sup>™</sup>

All Hebel® Power Floor™ can be cut to fit requirid spaces. The width of the Hebel® Power Floor™ can be cut to a minimum of 12" along its length (except the bottom panel, to avoid breaks and waste (see Fig. 5A).

Where cutting of panels lengthwise is required, the minimum width of cut panel allowable is 10" to ensure sufficient reinforcing is located in each panel. If a narrower piece is required against a floor edge, the last two panels should be reduced in width so that both exceed 10" in width. All reinforcing exposed on cut panels should be coated with anti-corrosion agent.

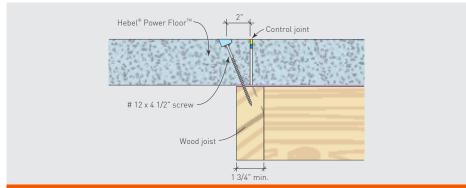


Fig. 6: Fixing to Timber Joists at chande in Joist Orientation.

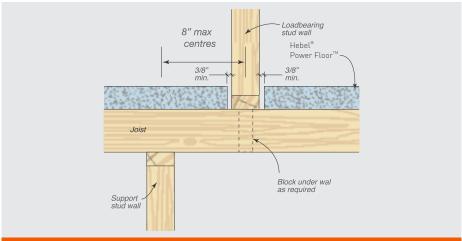


Fig. 7: Fitted Flooring with Internal Loadbearing Wall.



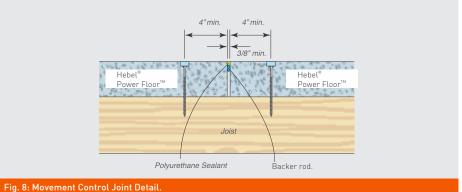
#### **Cutting Procedures:**

- a) Prepare a flat surface for cutting
- b) To support Hebel® Power Floor™. wood pieces must be placed at the edges of the Panel.

For transversal cuts, add wood pieces along the side of the cuts.

For longitudinal cuts, add wood pieces to avoid cracking in the panel at every 30" (maximum).

c) Check for full contact between wood pieces and Hebel® Power  $\mathsf{Floor}^{\mathsf{TM}}$ 



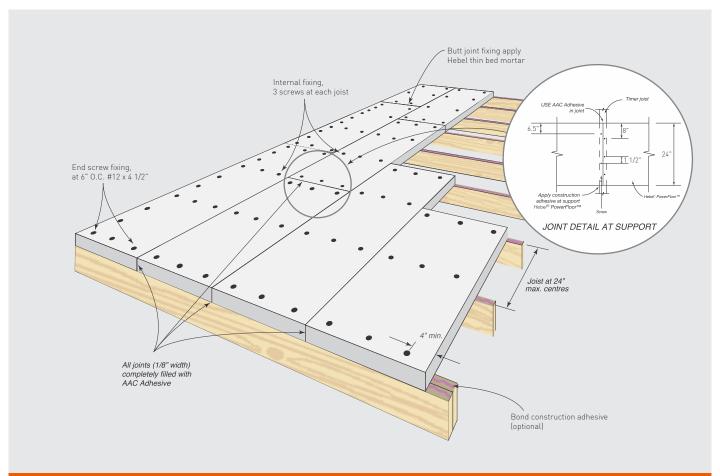
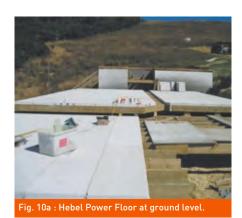


Fig. 9:  $Hebel^{\circ}$  PowerFloor<sup>TM</sup> Panel Fixing Details.



#12 x 4 1/2" screw Hebel® Power Floor <sup>™</sup> 3/4" (min) Metal joist-13/4" min.

Fig. 11: Fixing to Steel Joists

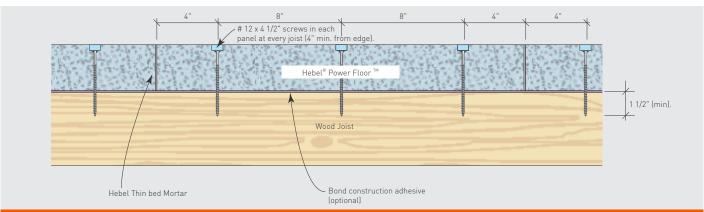


Fig. 10b: Cross-section of Hebel® PowerFloor™ Installation on Timber Joists.

Wedge if necessary.

- d) Trace the cut dimension and place a ruler as a quide.
- e) Cut the Hebel® Power Floor™ using a circular saw with a metal cut blade (see application requirements).

**Note:** Hebel<sup>®</sup> Power Floor<sup>™</sup> reinforcement exposed during the cutting process must be coated with any anticorrosive paint.

# 4 Floor Covering Installation

#### 4.1 Carpet Installation

#### Panel Surface Preparation

Sweep the floor surface to remove debris and loose particles. Expose all surface blemishes such as chips, cracks, gaps, ridges or the like. Fill all unacceptable locations with an appropriate and compatible patching compound such as Hebel Patch or levelling compound as required. Ensure panels are then dry.



Installation of carpet gripper prior to laying carpet requires the use of specifically selected nails or course threaded screws. Standard fixings supplied with the carpet gripper are not suitable for fixing to Hebel PowerFloor panels.

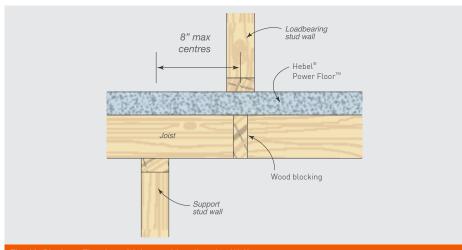


Fig. 12: Platform Flooring with Internal Loadbearing Wall.

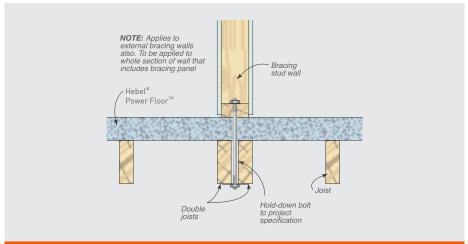


Fig. 13: Hold-down of Internal Bracing Wall Parallet to Joists on Platform Floor.

Carpet gripper strips are available without factory supplied nails. For carpet gripper installation near the panel edge, only glue is recommended. If relying on glue only, the carpet cannot be stretched until the glue is set after approximately 24 hours. (See figures 15, 16 and 17)

#### **Underlay Installation**

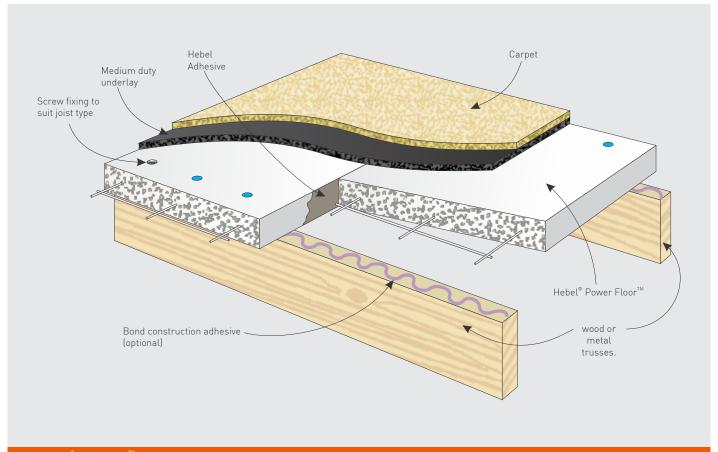
Minimum medium duty underlay is to be used. No other special requirements.

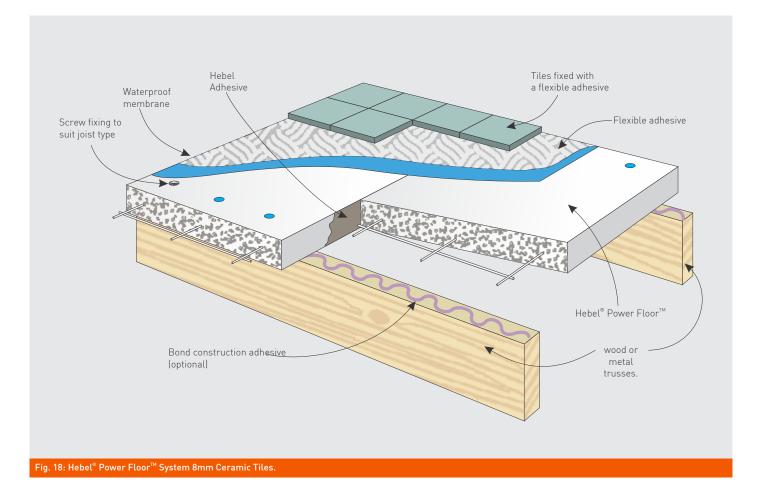
#### Carpet Installation

As per carpet manufacturer's guidelines. No other special requirements.









#### 4.2 Tile Installation Panel **Surface Preparation**

Sweep the floor surface to remove debris and loose particles. Expose all surface blemishes such as chips, cracks, gaps, ridges or the like. Fill all unacceptable locations with an appropriate and compatible patching compound such as Hebel Patch or levelling compound as required. Ensure panels are then dry.

As per manufacturer's quidelines. Apply tiles to screed or adhesive as per normal floor (See figure 18 and 19].

#### **Direct Stick Adhesive**

Sealer as per manufacturer's recommendations. Waterproof membrane as required, for balconies and wet areas.

Notes: Control Joints - ensure Control Joints are installed in tiles at the appropriate location of floor Control Joints. Penetration - seal penetrations through waterproof membrane.



#### 4.3 Vinyl Installation

Panel surface preparation weep the floor surface to remove debris and loose particles. Expose all surface blemishes such as chips, cracks, gaps, ridges or the like. Fill all unacceptable locations with an appropriate and compatible patching compound such as Hebel Patch or levelling compound as required. Ensure panels are then dry. (See figure 21).

#### Notes:

- 1. Ensure panel preparation is completed properly and thoroughly to avoid crunching.
- 2. When screed is used, ensure that the additional load is taken into account in the sub floor design.

#### 4.4 Timber Installation

Panel surface preparation sweep the floor surface to remove debris and loose particles. Expose all surface blemishes such as chips, cracks, gaps, ridges or the like. Fill all unacceptable locations with an appropriate and compatible patching compound such as Hebel Patch or levelling compound as required. Ensure panels are then dry (See figure 20 and 22).

#### Moisture

Timber is affected by changes in environmental conditions and it is good practice to allow the flooring to acclimatise to the environment before installation.

If there is significant moisture in the Hebel PowerFloor (>6%) a membrane, such as min. 200 micron polyethylene sheeting, should be placed over the top surface of the Hebel PowerFloor

#### Timber Strip Flooring

Batten fix - ensuring flatness is not as critical as direct mechanical fix. Anchor battens at the required centres using anchors suitable for AAC, eq. Mungo MBSP1080.

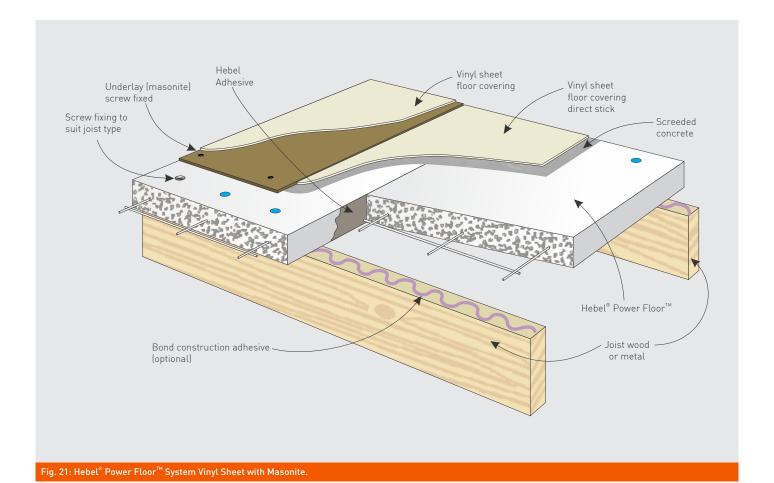
Direct mechanical fix - install min. 12mm plywood sheets to Hebel PowerFloor using construction Maxbond or equivalent and 65-75mm coarse thread countersunk screws at max 600mm centres.

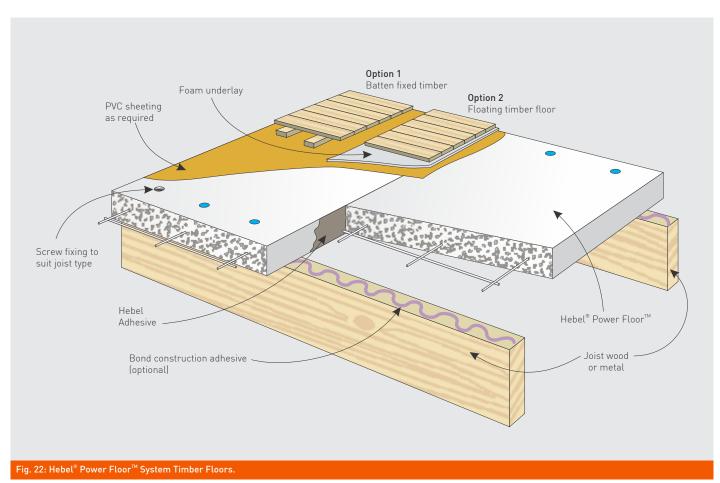
#### Floating Timber Floor

Underlay / backing installed as per normal for a concrete slab.

No special requirements for floating timber flooring installation.







#### Contact us

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