Technical Sheet and Installation Guide

Hebel® Slab Panel
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.
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

Aerated Concrete Hebel®
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.

- **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 product meets Standards and Evaluation issued by:

- **UL 530-13**
- **ACI 523.4-R09**
- **ASTM C 1693-11**
- **ASTM C 1660-09**

Green Building Certifications

- Leadership in Energy and Environment Design (LEED)
- American Institute of Architects (AIA)
- Architectural Ceramic Board (ACB)
- American Concrete Institute (ACI)
- Institute of Housing Science (IHS)
- International Association for the Evaluation of箭头
- Energy (IAEE)

This product is certified by Underwriters Laboratories (UL) with the maximum fire-rating classification.
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Autoclaved Aerated Concrete

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Hebel® Slab Panel
Autoclaved Aerated Concrete

Uses and applications
Hebel® Slab Panel are steel reinforced units used to build roof or floor slabs that work simply supported over masonry walls (either Hebel® or traditional), and also by steel, concrete or wood structures. Their design is based on span-load requirements.

Construction Advantages
- Lightweight (37pcf).
- No propping required.
- No concrete topping required.
- Custom made.
- Excellent Load carrying capacity.
- Covers up to 20’ span.
- Lightweight equipment needed to install.
- 5 people crew to install.
- Speed of construction.

Application:
- Commercial
- Residential
- Industrial

Certifications:
UL, IAPMO, TDI.

More benefits of Hebel® Slab Panel
- Fire resistance.
- Acoustic performance.
- Thermal performance.
- Pest and rot resistant.
- Not Mildew.
- Low maintenance.
- Friendly to the environment and Sustainable.
- Grants LEED points.
Hebel® Slab Panel
Autoclaved Aerated Concrete
1 Technical Sheet

1.1 Hebel® Slab Panel

General Features
Hebel® Autoclaved Aerated Concrete (AAC) Floor and Roof Slab Panels are lightweight, fire resistant, fast and easy to install and provide lifelong superior thermal insulation. Hebel® Slab Panels are steel reinforced (Grade 70) Autoclaved Aerated Concrete elements. The interior steel wire reinforcement is covered with an anti-corrosion coating. Hebel Slab Panel is produced in strength class: AAC-4 and AAC-6, in accordance to the standards ASTM C 1693 and ASTM C 1694.

Uses
Hebel® Slab Panels are used as floor and roof simply-supported slabs on Hebel® Masonry Components or CMU load-bearing walls, wood, concrete or steel beams. These panels are used in residential, multi-family housing, hotels, offices and industrial buildings. Hebel® AAC meets the diverse demands better than any other material due to the numerous advantages of its physical, mechanical, energy efficiency and safety properties.

Dimensions
Length: 13 Up to 20 ft.
Width: 14 24 in.
Nominal Thickness: 15 4, 5, 6, 7, 8, 10 and 12 in.

Characteristic | Unit | AAC-4 Class | AAC-6 Class |
--- | --- | --- | --- |
Compressive Strength (f’AAC) | psi | 580 | 870 |
Nominal Density |pcf | 31 | 37 |
Design Weight |pcf | 37 | 45 |
Drying Shrinkage |% | <0.02 | <0.02 |
Thermal Expansion Coefficient |1/°F | 4.4x10⁻⁵ | 4.4x10⁻⁵ |
Modulus of Elasticity |psi | 295,800 | 377,000 |
Allowable Bearing Stress |psi | 348 | 523 |

Table 1: Physical and design properties.

<table>
<thead>
<tr>
<th>Thermal Conductivity Steady-State (BTU-in/ft²-h-°F)</th>
<th>Class</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC-4</td>
<td>AAC-6</td>
<td></td>
</tr>
<tr>
<td>0.9124</td>
<td>0.9811</td>
<td></td>
</tr>
</tbody>
</table>

Units: BTU= British Thermal Unit, in= inches, ft= feet, h= hour, °F= Fahrenheit.

Table 2: Hebel® Slab Panel Thermal Conductivity.

<table>
<thead>
<tr>
<th>Fire Performance</th>
<th>Thickness (Inch)</th>
<th>Fire Ratings (Hours)</th>
<th>Design Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hebel® Slab Panel Reinforced Slab Panel AAC-4 / AAC-6</td>
<td>≥ 4</td>
<td>1</td>
<td>K909</td>
</tr>
<tr>
<td>AAC-6</td>
<td>≥ 5</td>
<td>4</td>
<td>K909</td>
</tr>
<tr>
<td>≥ 5</td>
<td>4</td>
<td>P932</td>
<td></td>
</tr>
</tbody>
</table>

Note: Testing performed at underwriters Laboratories, Inc., Northbrook, IL under ASTM E119 (UL/ ANSI 263) “Fire Test of Building Constructions and Materials”.

Table 3: Hebel® Slab Panel fire rating.

| Allowable Load Table For Hebel® Panels |
|---|---|---|---|---|
| Thickness (in) | 20 | 40 | 60 | 80 | 20 | 40 | 60 | 80 |
| AAC-6 | Roof | Floor | Roof | Roof | Floor | Roof | Roof |
| Maximum Permissible Span (ft) | 4 | 12 | 11 | 9 | 8 | 11 | 9 | 8 |
| 6 | 18 | 15 | 13 | 12 | 16 | 14 | 13 | 12 |
| 8 | 21 | 19 | 17 | 16 | 20 | 18 | 17 | 16 |
| 10 | 20 | 20 | 20 | 19 | 20 | 19 | 19 | 20 |

1. The allowable superimposed out-of-plane loads are nominal loads defined in IBC Section 1602.1 and derived from strength design.
2. Design unit weights of material are 37 pcf for AAC 4 and 45 pcf for AAC 6.
3. The roof and floor slabs are designed for dead weight and uniformly distributed downward superimposed loads only. If uplift (wind) forces are encountered, it is necessary to perform further calculations to determine the uplift load capacity.
4. For Slab panels with a maximum span of 20’ or less, the Live Load deflection (LL) should not exceed L/360.
5. More stringent deflection limits and/or analysis of long-term deflection must be provided if slabs support nonstructural panels likely to be damaged by large deflections.

Table 4: Allowable service loads for AAC Slab Panels.
2 Design Considerations.

2.1 General Considerations.

- **Hebel® Autoclaved Aerated Concrete (AAC) Slab Panels** can be used as floor or roof systems and shall be designed in order to comply with strength and serviceability requirements as specified by ACI 523.4R-09.

- The Slab Panel thickness and the span will determine the allowable service load (see Table 4). The load must comply with the Local and Regional Building Code.

- Floor and roof panels can be supported by AAC Masonry Walls, reinforced concrete, concrete masonry walls (CMU), wood or steel beams.

- AAC Slab Panels are reinforced with two layers of high strength smooth bars \( \text{Fy} = 70,000 \text{ psi} \) which are protected with an anticorrosive coat.

- The longitudinal bars develop their tensile stress using mechanical anchorage provided by cross bars.

3 Installation Guide

3.1 General Installation Guidelines.

**Before Installation of Hebel® Slab Panels**

1. Clear the Unloading and Provisional Storage Area

- Consult an appropriate safety professional or knowledgeable OSHA trainer for “rigging” or other safety considerations. Insure adherence to Leading Edge Support OSHA Guidelines.

- Carefully unload panels using pallet forks (forklift, nylon straps, slings or pallet fork on a crane cable). Place pallets over wood blocks (panels must not be in contact with ground).

- Storage areas should be accessible to delivery trucks and convenient to staging areas. If possible, drop-deliver the material right to the material staging areas.

- Material should always be stored away from other construction activities on a flatgrade area that is not susceptible to standing water, erosion or settling.

2. Check Material and Installation Logistics

- Verify dimensions, positions and quantity of the panels according to shop drawings.

- Define sequence of panel installation according to Hebel® shop drawings. To help speed installation, place the panels with the groove side at the beginning and continue.

- Define type of installation equipment (crane or similar).

- Evaluate quantity of personnel required for installation (4 to 5 assistants for panel installation plus crane operator).

- Keep the material covered and banded until ready for installation. Excessive handling may cause damage. Set delivery schedule to match the erection sequence.

- Chips and spalls can be repaired. If any reinforcing is visible, contact an authorized Hebel AAC representative. All damaged surface areas may be repaired using a compatible Hebel AAC patching compound.
All panels that have surface or minor cracks are usable. Contact an authorized Hebel AAC representative when a crack is extended completely through the panel.

3. Check Existing Steel Accessories (Not Supplied by Litecrete, Inc).

- Steel accessories for holes (ducts).
- Check shop drawings for additional steel accessories needed.
- Steel plate for connecting Hebel Slab Panels to steel structure.

4. Check Support Structure

- All support elements (loadbearing walls, concrete or steel beams, etc) must be already finished before receiving floor and roof panels.
- Check layout and top of supporting structure. AAC top block adjustments must not be less than 2” in height, or else cement-sand mortar (1:4) must be used (see Fig. 12-A).
- Bearing lengths for AAC floor and roof panels should comply with Table 5.
- Mark guidelines on top of the supporting elements according to bearing lengths in Hebel® shop drawings.
- For non-load-bearing elements, put a layer of a compressible material (polystyrene or similar) on top.

3.2 Installation Requirements

- The actual list of tools, equipment and other materials will depend on type of project and workforce.

Tools:
- Hammer-Ax
- Rubber Mallet
- Scrub Brush
- Hebel® Sanding Float
- Hebel® Plastic Bucket
- Chasing Tools
- Spatula
- Chalk-Line
- Tape Measure
- Finishing Trowels
- Ripping Bar (36”)

Equipment:
- Hebel® Slab Panel Lifting Gear or Clamp (optional).
- Telescopic Crane or similar.

Table 5: Physical and design properties.

<table>
<thead>
<tr>
<th>Support Elements</th>
<th>Minimum Bearing Length (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hebel® Masonry</td>
<td>Ld/80 or 2 ¾” (min)</td>
</tr>
<tr>
<td>Concrete or Reinforced Concrete</td>
<td>Ld/80 or 2.0” (min)</td>
</tr>
<tr>
<td>Wood</td>
<td>Ld/80 or 2.0” (min)</td>
</tr>
<tr>
<td>Steel Beams</td>
<td>Ld/80 or 1.5” (min)</td>
</tr>
</tbody>
</table>

Note: Ld = Effective span length, Le = Clear span, where Ld = Le + 3 inches.

“Please refer to our SDS for further information”:
Precaution: Always wear proper personal protection equipment when using a circular saw, band saw or an angle grinder, including goggles, face-shield, hearing protection and dust mask.

Note: Mayor equipment / tools are listed but not limited to items noted above to complete the installation.

Hebel® Masonry
Cement-Sand Mortar (1:4)
Concrete or Reinforced Concrete
Wood
Steel Beams

Circular Saw (8¾” diam min) with diamond blade or Gasoline-Powered Circular Saws (12” min).
½” Power Drill / Stirrer.
Router / Bits.
Hebel® Hand Saw.
Hebel® Turners (2 pc).
Safety Equipment (Hard hat, face-shield, goggles, dust mask, ear plugs, gloves, safety shoes, etc.).

Fig. 5: Slab Panel supported by steel elements.

Fig. 6: Panel lifting gear T800.

Fig. 7: Panel lifting gear T1400.
Other Materials:

- Hebel® Thin Bed Mortar and Repair
- Mortar
- Hebel® Rebar Spacers
- Anticorrosive Paint
- Fiberglass Mesh
- 4x4 in. Wood Block [2 ft long]
- Rebar #3, #4
- Cement-Sand Mortar
- Concrete [3,000 psi]
- Steel Plates
- Anchors & Hebel® Nails

3.3 Installation of Hebel® Slab Panels

a. Identify Hebel® Panels to be installed according to previous logistics [see section 3.1 (2) and Fig. 3].

b. Carefully unpack panels using scissors or a hammer ax. Verify that panels are in a stable position prior to cutting the banding.

c. Over 4x4” wood blocks, rotate Slab Panel 90° or until tongue and groove profiles are facing up. Mark center of panel -Panel length/2- [see Fig. 8].

d. Clean the tongue and groove surface using a sanding float, hammer and a brush.

e. Place lifting gear at center of panel [see Fig. 8].

f. Using the pulleys, close clamps, clipping the tongue and groove sides of the panel.

g. Fasten safety chains avoiding excessive tightening, lower the locking lever (unlock position) and indicate to crane operator to lift the panel [see Fig. 9].

h. Two people will lead the panel to place it on to its final position.

i. Remove safety chains [see Fig. 10].

j. Place the panel on the guidelines previously traced. Verify minimum bearing length [see Fig. 11].

k. Once the panel is placed, open the clamps, raise the locking lever (lock position) and remove the lifting gear.

l. This procedure should be followed for each successive panel.

IMPORTANT:

- All crew members must comply with all safety requirements set by OSHA.
- Handle panels with care to avoid damage.
- Make chases needed prior to installation.
- It is strictly forbidden at any time for people to be under the load during lifting.
- Never put hands, arms, feet or legs between the jaws of the clamp.
- The load must always be hoisted; it may not dragged along the ground.
- Avoid sudden movement to prevent accidental release of the load.
Fig. 12: Hebel® Slab panels over masonry.

- **Longitudinal joint (Reinforced)**
- **Transversal joint (Non-Reinforced)**

**Section A-A**
- Hebel® rebar spacer (2 per panel)
- Longitudinal reinforcement along panel joint
- Ring beam: concrete f'c=3 ksi 2 #4 (along) and 1 #3@16” all around the perimeter

**Section B-B**
- Hebel® Masonry wall (Load-bearing)
- Groove

**Panel position**
- Cantilever panel anchorage (Steel plate or re-bar)
- Cantilever panel anchorages

**Panel Thickness**
- 2 3/4” minimum

**Hebel® Slab panel**
- Lateral overlap

**Hebel® Masonry wall (Non Load-bearing)**
- Panel Thickness
3.4 Cast and Reinforcement of Longitudinal Joints and Ring Beams

After panel installation, place steel reinforcement in longitudinal joints [see Fig. 12 to 15 and 17] and ring beams surrounding panels [see Fig. 14 and 17]. Forms must be placed in perimetral ring beams.

One #3 rebar is required in longitudinal joints [shear joints], wedged with rebar spacers [2 per panel], and filled with cement-sand mortar (1:4) - see Fig. 14. Moist Panel joints before application.

Ring beams require 2#4 rebars (along) and a #3 every 16” (diagonal) and filled with regular concrete f’c= 3 ksi. The maximum size of coarse aggregate is 3/8” and 5” to 6” of slump. Ring beam and form surfaces must be moist before concrete casting.
Fig. 17: Hebel® Slab panel over steel structure.

Panel position

Load-bearing element

1#3 + cement-sand mortar

1/4 Plate thickness

Panel position

Load-bearing element

See joint and steel plate detail

Steel plates (every 2 joints, alternated)

Hebel® rebar spacer (2 per panel)

Hebel® Slab panel

Longitudinal joint (Reinforced)

Ring beam

Transversal joint (Non reinforced)

Installation sequence

Fill with cement-sand mortar

1/8”

1/4”

1/2”

5/8”

1/8”

1/2”

1”

2”

A

A

LONGITUDINAL JOINT (1 # 3 continuous + cement-sand mortar)

SECTION A-A

PLATE DETAIL

Steel plates (every 2 joints, alternated)
When Hebel® Panels are installed on a steel structure, steel plates must be welded (every 2 longitudinal joints, alternated) to the structure for connection (see Fig. 17 to 21). Place steel plates after panel installation to ensure correct location.
3.5 Utilities Installation

Openings

Openings in floor and roofs for A/C ducts, staircases, roof windows, air exhausters, etc. are built using steel support. For more information, please call Xella Technical Department.

Electrical Conduits

Electrical conduits with a diameter ≤ 1”, can be lodged through longitudinal joints on top or bottom of the panels. For electrical conduits > 1”, or several electrical conduits, longitudinal joints can be widened to lodge them. It is not recommended to chase on top and across the panel width - transversal chase- (see Fig. 16).

It is possible to define cut surfaces in Panels regarding installations. For more information, please call Litecrete, Inc. Technical Department.

Piping Lines

When required, PVC and other piping lines can pass through holes in the panels. The maximum hole diameter permitted in one panel is 6” or 12” in a joint between panels (6” each panel). If more than one hole is required, they must be aligned along the length of the panel. Only two longitudinal rebar in the bottom reinforcement of the panel can be cut (see Fig. 22 and 24) casting.

3.6 Panels Cutting

According to shop drawings, identify Hebel® Slab Panels to be cut. Permissible cutting length is indicated on shop drawings, otherwise contact Litecrete, Inc. Technical Department.

Along its length, Hebel® Slab Panel can be cut 1/3” the width.

Cutting Equipment Options

- Power Cutter (gasoline powered) 14” or 16” blade or greater (see Fig. 23).

Cutting Procedures

a. Prepare a flat surface for cutting site.

b. Check dimensions of cuts to be made.

c. For transversal cuts, wood pieces must be placed along the sides of the cut and at the edges of the panel.

d. For longitudinal cuts, wood pieces must be placed at every 6 ft. [max] for 6 to 12 in thick panels and every 4 ft for panels 4 to 5 in thick.

e. Check for full contact between wood pieces and panel. Wedge if necessary.

f. Place a ruler as a guide and trace the cut dimensions.

g. Proceed with panel cutting, verifying that cutting dimensions comply with specifications. Transversal and longitudinal cuts must be made with panel in horizontal position.

h. Apply anticorrosive paint at exposed reinforced bar tips.

Fig. 23: Power cutter.

Fig. 22: Sanitary utilities.

Fig. 24: Maximum dimensions of holes through slab panel.
4 Renders and Finishes

4.1 Products

Surface Patching

Use Hebel Repair Mortar to patch chips, breaks and other imperfections on surfaces of Hebel Slab Panels.

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

Fiberglass Mesh

Fiberglass mesh, 6” minimum width, should be installed directly over one layer of render (without nails) on every inferior joint between panels (see Fig. 13) and in places according to construction details. Fiberglass mesh is not required in case of suspended ceilings.

Render and Finishes for ceiling

Underneath Hebel Slab Panels (ceiling) can be finish with Hebel Stucco, gypsum plaster, acrylic texture coat, elastomeric finishes, cement based finishes; as finish floor on top of Hebel slab panels ceramic or clay tiles, laminated stone, concrete pieces, carpet, etc. can be used (see Fig. 27).

Roof panels can be finished using water proofing membrane systems (SBS, APP, TPO, etc), elastomeric roof coatings, concrete or ceramic roof tiles, asphalt roof shingles.

For more information and technical assistance, please contact Litecrete, Inc.

Fasteners

Anchors used with AAC shall be made of plastic or nylon. Wood, fiber, lead, metal or expansion anchors are not recommended. Use power drills to make holes for fasteners and masonry drill-bits recommended [diameter] on table 6. Drilling shall be avoided. The anchor shall penetrate tightly in the hole to avoid rotation when placing the screw. When using Fischer anchors, the external finish layer surrounding the hole should be removed to allow the anchor to fully penetrate into the AAC element.

Hebel AAC Nail:

Hebel galvanized AAC nails are designed specifically to provide a definitive anchorage in the AAC. Hebel AAC nails are directly hammered-into the AAC element – no drilling is required.

Screws

Always use screws of the diameter recommended on table 6. Minimum length of screw is defined by the anchor length plus the thickness of the finish layer and the thickness of the element to be fixed.

Precautions

Load values (pull-out strength) shown in chart shall be used only as a reference guide; field testing is suggested according to project requirements. The load values (lb) shown in chart are for direct pull-out and a safety factor of 5 is included in them. Full penetration of screws into the anchor is assumed to obtain such load values.
## Fasteners & Nails

### Autoclaved Aerated Concrete Technical Sheet

<table>
<thead>
<tr>
<th>Anchor / Nail</th>
<th>Drill Bit for Masonry</th>
<th>Screw</th>
<th>Load Value* (pull-out strength)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td><strong>Ø Diam</strong></td>
<td><strong>Ø in</strong></td>
<td><strong>in</strong></td>
</tr>
<tr>
<td>Hebel AAC Nails®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hebel AAC Nail 4 in.</td>
<td>4”</td>
<td>1/4”</td>
<td>Fixed directly with hammer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hebel AAC Nail 6 in.</td>
<td>6”</td>
<td>5/16”</td>
<td></td>
</tr>
<tr>
<td>Dry Wall Screw</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8 x 3”</td>
<td>3”</td>
<td>1/2”</td>
<td>Not pre-drilling is required</td>
</tr>
<tr>
<td>8 x 2½”</td>
<td>2½”</td>
<td>1/2”</td>
<td>Not pre-drilling is required</td>
</tr>
<tr>
<td>Universal Plastic Anchor</td>
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<td></td>
</tr>
<tr>
<td>Anchor TP 14 - 1/4”</td>
<td>1½”</td>
<td>1/4”</td>
<td>1/4”</td>
</tr>
<tr>
<td>Anchor TP 56 - 5/16”</td>
<td>1½”</td>
<td>5/16”</td>
<td>5/16”</td>
</tr>
<tr>
<td>Anchor TP 38 - 3/8”</td>
<td>2”</td>
<td>3/8”</td>
<td>5/16”</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For use in solid walls (Anclo® or similar).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THORSMAN®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchor Red TP 2X</td>
<td>1½”</td>
<td>1/4”</td>
<td>3/16”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1/4”</td>
</tr>
<tr>
<td>Anchor Brown TP 2B</td>
<td>1½”</td>
<td>5/16”</td>
<td>1/4”</td>
</tr>
<tr>
<td>Anchor Blue TP 3</td>
<td>1¾”</td>
<td>3/8”</td>
<td>5/16”</td>
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<tr>
<td>TOX VLF®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchor 6/70</td>
<td>2½”</td>
<td>1/4”</td>
<td>1/4”</td>
</tr>
<tr>
<td>Anchor 8/80 - 8/135</td>
<td>3½”+</td>
<td>5/16”</td>
<td>5/16”</td>
</tr>
<tr>
<td>Anchor 10/100 - 10/160</td>
<td>4”+</td>
<td>3/8”</td>
<td>3/8”</td>
</tr>
<tr>
<td>HILTI® Plastic Anchors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchor HUD-1 (10x50)</td>
<td>2”</td>
<td>3/8”</td>
<td>3/8”</td>
</tr>
<tr>
<td>Anchor HUD-1 (12x60)</td>
<td>2¾”</td>
<td>1/2”</td>
<td>7/16”</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Available at Hilti Shops and Construction Depots</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GB14  S10H80R GB10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FISCHER®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchor GB 10</td>
<td>2”</td>
<td>3/8”</td>
<td>3/8”</td>
</tr>
<tr>
<td>Anchor GB 14</td>
<td>3”</td>
<td>5/8”</td>
<td>5/8”</td>
</tr>
<tr>
<td>Anchor S10H80R</td>
<td>3½”</td>
<td>3/8”</td>
<td>3/8”</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Anchors without screws, except TOX VLF anchors. *Drill bit diameter change between AAC-4 y AAC-6 classes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Available at Litecrete, Inc. * Available at Hilti Shops, Home Depot, Lowe’s, etc. * Available at <a href="http://www.demandproducts.com">www.demandproducts.com</a> * For AAC-6 (Block &amp; Panel) use 1/4” drill bit. *For AAC-6 (Block &amp; Panel) use 1/2” drill bit. *Safety Factor [SF]=5. Use masonry drill bits. Anchors do not include screws (except TOX anchors).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMPORTANT: Information has been adapted considering Autoclaved Aerated Concrete (AAC) material and may differ from original fastener manufacturer.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 6: Anchoring into Hebel® Slab Panel.
Contact us

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833 Isom Rd.
San Antonio, TX 78216

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