BUILDING SOLUTIONS
AUTOCLAVED AERATED CONCRETE
Xella Aircrète North America, the leading manufacturer of Hebel® Autoclaved Aerated Concrete (AAC) is an amazingly innovative building material that has been used in Europe for more than 80 years and in the US for more than 15 years. Products and systems have been developed for all types of the construction industry: Industrial, commercial, high-rise buildings, schools, hospital and more.

Hebel® AAC is a lightweight concrete that is formed into blocks and reinforced panels for a wide range of loadbearing and non-loadbearing construction applications. It is manufactured from sand, cement, recycled material, lime, gypsum, aluminium paste and water. It is moulded, cut and steam pressure cured in an autoclave before being packed, ready for transport.

Hebel® AAC delivers more benefits than the traditional materials such as strength, acoustics, fire and pest resistance and is installed faster, saving valuable construction time. It has a unique combination of thermal mass and insulation providing a more comfortable living environment.

Why Hebel
One of the worlds leading manufacturer of Hebel autoclaved aerated concrete (AAC), Xella Aircrète North America is transforming the building industry with Hebel, its ultra-lightweight concrete.

Committed to providing the United States with environmentally responsible building products that conserve material and energy usage, Xella’s Hebel Aerated Concrete is recognized as the largest producer in Europe by capacity based on management estimates based on different sources and member of the Green Building Council. In addition, it has a high UL rating for fire resistance.

Xella Aircrète North America is a division of Germany-based Xella International.

More than 6,000 employees for Xella’s total 97 plants and offices throughout 30 countries worldwide, including North America, Europe and Asia.

Hebel Aerated Concrete provides 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. In addition, Hebel is energy efficient, fire resistant and long lasting, which, over time, will reduce energy, insurance and maintenance costs to building owners. A wide range of industries can benefit from Hebel’s custom blocks and reinforced panels, including those in the commercial, educational, hospitality, industrial, institutional, governmental and residential markets.
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**
Strength can resist wind pressures without reinforcement. Shear wall strength can resist lateral loads. High impact resistance.

**Fire Resistant**
HEBEL AAC has proven to remain fully intact and withstand the stress of fire for up to 4 hours without any impairment to its stability. Even under intense heat, HEBEL AAC remains tightly sealed against smoke and gas, emitting no toxic fumes.

**Acoustic Insulation**
The solid wall construction of a building made of Hebel AAC provides exceptional acoustic insulation. Its porous structure and high surface mass, coupled with its ability to dampen mechanical vibration energy, greatly reduces outside environmental.

**Resistance to humidity**
Your works are always protected against moisture. It allows the passage of water vapor, reducing condensation. It is an inert material.

**Green Building**
Hebel and green building attributes
- Recyclable, inert & non-toxic.
- Energy saving, manufacturing through occupancy.
- Excellent life-cycle cost.
- Durable, natural finish options.
- Supports LEED credits.
Add up USGBC LEED Credits with Hebel

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:

[Logos of various standards and evaluations]
COOL IN SUMMER
WARM IN WINTER
SAVE ENERGY COSTS
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Xella is a company with more than 6,000 employees. Present in more than 30 countries worldwide.
“80 years of experience around the world and more than 15 years in the USA”
Residences
A home built with Hebel is a living place that protects and provides comfort to all family members. Bringing great energy savings for life.

Hotels
Any multifunctional design challenge is possible with Hebel, as example Hotels that comply very specific requirements.
Housing series
Building with Hebel, means high technology materials that besides providing security they promote saving daily resources once they are built.

HEBEL IS PERFECTION
The decision of using Hebel does not depends on a particular argument, as it combines so many advantages in just one product. Each of our clients finds the perfect building solution within our different construction systems for every specific project.

Multilevel Buildings
Hebel® Aerated Concrete Autoclaved is ideal for multilevel buildings. Building process is faster than conventional materials.

Industries
Due to its strength, it can resist wind pressures without reinforcement, which makes it perfect for industrial buildings. It provides a high impact resistance.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Unit</th>
<th>AAC-3</th>
<th>AAC-4</th>
<th>AAC-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength (f’ aac)</td>
<td>psi</td>
<td>435</td>
<td>580</td>
<td>870</td>
</tr>
<tr>
<td>Nominal Density</td>
<td>pcf</td>
<td>400</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Design Weigth</td>
<td>pcf</td>
<td>480</td>
<td>600</td>
<td>720</td>
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<tr>
<td>Drying Shrinkage</td>
<td>%</td>
<td>&lt;0.02</td>
<td>&lt;0.02</td>
<td>&lt;0.02</td>
</tr>
<tr>
<td>Thermal Expansion Coefficient</td>
<td>1°/F</td>
<td>4.4x10^{-6}</td>
<td>4.4x10^{-6}</td>
<td>4.4x10^{-6}</td>
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<tr>
<td>Thermal Conductivity</td>
<td>BTU-in/ft² h °F</td>
<td>0.91</td>
<td>0.91</td>
<td>0.98</td>
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<tr>
<td>Modulus of Elasticity</td>
<td>psi</td>
<td>248890</td>
<td>295781</td>
<td>377246</td>
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<tr>
<td>Modulus of Rupture (MOR)</td>
<td>psi</td>
<td>100</td>
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<td>142</td>
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<tr>
<td>Bearing Stress</td>
<td>psi</td>
<td>261</td>
<td>348</td>
<td>522</td>
</tr>
</tbody>
</table>

AAC material is produced in accordance with ASTM-C-1693-11
STRONG WALLS

- Lightweight
- Acoustic
- No Mold - Mildew
- Fast construction
- Wind resistance
Uses and applications

Hebel Masonry Components are used to build reinforced load-bearing and nonload-bearing exterior and interior walls for residential, commercial, industrial and fire and shaft walls, commercial and industrial.

Hebel AAC meets the diverse demands better than any other material due to the numerous advantages of its physical, mechanical and energy efficiency properties.

Construction Advantages

- Solid walls.
- Energy savings up to 35%.
- Eliminates thermal bridges.
- Faster construction.
- High structural performance.

Benefits of Hebel® Masonry Components

- Savings in construction time and workforce.
- Fire resistance.
- Acoustic performance.
- Humidity resistance.
- Minimum waste
- Friendly to the environment.
- Sustainable.

Dimensions:
Length 24 in
Height 8 (7-7/8)in
Thickness 4 in to 12 in

Application:
Commercial
Residential
Industrial
More information about this product please enter the following link:
Hebel® Power Panel can be applied directly to wood or metal studs, eliminating the need for additional structural sheathing such as plywood. The Hebel Power Panels are reinforced internally with a steel mesh protected with anticorrosive coating. In addition, the lightweight nature of Hebel AAC allows a faster and more efficient construction.

**Uses and applications**

Hebel® Power Panel can be applied directly to wood or metal studs, eliminating the need for additional structural sheathing such as plywood. The Hebel Power Panels are reinforced internally with a steel mesh protected with anticorrosive coating. In addition, the lightweight nature of Hebel AAC allows a faster and more efficient construction.

**Construction Advantages**

- Steel Reinforced.
- Structural Performance.
- Fire Resistant.
- Light-weight.
- Long life.
- Efficient construction.
- Cost competitive.
- Fast and easy to install.
- Water penetration resistant.
- Termite and Pest-resistant.
- Workability.
- Environmentally friendly.

**More benefits of Hebel® Power Panel**

- Solid cellular concrete material, without deterioration of its properties over time.
- Monolithic surface: smooth walls with the capacity to receive all kinds of finishes or stonework.
- Greater thermal and acoustic insulation.
- Resistant to climate changes: rain, heat and humidity.
- As versatile as cutting, sanding, grooving.

**Dimensions:**

- Thickness 2 in and 3 in
- Length 8 and 10 ft
- Width 24 in

**Application:**

- Commercial
- Residential
- Industrial

[www.hebel-usa.com](http://www.hebel-usa.com)
More information about this product please enter the following link:
Hebel® Power Floor™
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 Gypcrete required.
- No water filtration into the building.
- Fast installation and accelerates the speed of construction.
- Excellent load carrying capacity.
- Lightweight panels.
- No pre-drilling is required.
- Pets and Rot Resistant.
- Workability.
- Smooth and solid concrete surface to received finish floor.

Benefits of Hebel® Power Floor™
- Fire resistance.
- Strength and security.
- Acoustic performance.
- Thermal performance.
- Not Mildew.
- Low maintenance.
- Grants LEED points.
- Solid concrete floor.

Dimensions:
Thickness 3 in
Length 6 and 6.67 ft
Width 24 in

Application:
Commercial
Residential
Hospitality
Assisted Living
Multifamily

www.hebel-usa.com
More information about this product please enter the following link:
Hebel® Vertical Load-Bearing Wall Panels

Uses and applications
Hebel AAC Hebel® Vertical Load Bearing exterior and interior walls for residentials, hotels, commercial and industrial buildings. The thickness and panel length (height) vary depending on the design requirements and constraints of the project.

Construction Advantages
- 4 Hour Fire Rating
- Moisture Resistant
- Mold Resistant
- Lightweight
- Pest and Rot Resistance
- Non-Toxic

Dimensions:
- Length Up to 20 ft
- Thickness 6, 7, 8, 10, and 12 in
- Width 24 in

Application:
- Commercial
- Residential
- Industrial

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

www.hebel-usa.com
More information about this product please enter the following link:
Hebel® Wall Panel
Autoclaved Aerated Concrete

Uses and applications
Hebel wall panels can be used as cladding over steel or concrete structures or as a loadbearing walls. Hebel wall panels are suitable for commercial/industrial and modular buildings. The installation process is simpler and quicker than conventional methods.

Construction Advantages
- Superior Fire rating.
- Speed of Construction.
- Durability (Low maintenance)
- Lightweight (37pcf)
- Lightweight equipment needed to install.
- 5 people crew to install.
- Custom made.
- Workability.

Benefits of Hebel® Wall Panel
- Fire resistance.
- Strength and security.
- Wind load capacity.
- Acoustic performance.
- Thermal performance.
- Pest and rot resistant.
- Not Mildew.
- Low maintenance.
- Friendly to the environment and Sustainable.
- Grants LEED points.

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

Application:
Commercial
Hospitality
Dorms
Assisted Living
Fire walls
Industrial

www.hebel-usa.com
More information about this product please enter the following link:
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.

Uses and applications

- 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.

Construction Advantages

- Fire resistance.
- Acoustic performance.
- Thermal performance.
- Pest and rot resistant.
- Not Mildew.
- Low maintenance.
- Friendly to the environment and Sustainable.
- Grants LEED points.

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

Application:
- Commercial
- Residential
- Industrial

www.hebel-usa.com
More information about this product please enter the following link:
Hebel fence can be used for fence construction on landscaping, providing privacy, protection and style. Decorative and creative ideas can be adapted to Hebel Fence such as ornamental moldings, openings, posts, etc.

Uses and applications
Hebel fence can be used for fence construction on landscaping, providing privacy, protection and style. Decorative and creative ideas can be adapted to Hebel Fence such as ornamental moldings, openings, posts, etc.

Construction Advantages
- Fast and easy to install.
- Lightweight.
- Fire Resistant.
- Strength and security.
- Versatile and affordable.
- Sound barrier.
- Low maintenance (Durability).

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

Dimensions:
- Length: 8ft
- Width: 24 in
- Nominal Thickness: 2 and 3 in

Application:
- Commercial
- Residential
- Industrial

www.hebel-usa.com
More information about this product please enter the following link:
360° Service: We provide support since the development of your project, offering the best building solution based on your needs. We are your best ally for construction projects.

- Specification
- Estimating
- Value Engineering
- Technical and Engineering support
- Training and product consultant
- Logistics
- Customer Service
QUOTE AND BUILD YOUR PROJECTS WITH US
1-877-41-HEBEL
Phone (210) 402-3223
hebel-usa@xella.com