



build it!

AAC panel and block plants

economic  
sustainable  
efficient

 SINCE 1892 **WEHRHAHN**

90 / 600 / 175

Q<sub>2</sub>



# Application of AAC

## commercial – residential - industrial

In most parts of the world, Autoclaved Aerated Concrete (AAC) is used as a structural or infill-element. AAC in the U.S. has found an additional use as cladding or fire protection on framed constructions. This suits well with the prevailing construction methods and has already opened a good future for AAC.

**AAC steel reinforced wall elements and floor panels can easily be installed directly on metal or wooden frames.**



### Structural AAC precast elements

Beside framed construction, AAC steel reinforced elements are used as structural load bearing precast elements for roof, floor and wall.

#### **JACOB PICKETT (AAC East - Application consultant)**

„Why are clients using our AAC precast panels instead of DensGlass or sheetrock products?  
Because of: Fire rating and ease of installation, structural integrity and workability, energy and insurance savings ... and most importantly: AAC is not affected by rainy weather.”



# Properties of AAC panels on framed constructions

## Uses

AAC panels can be used as cladding for internal and external walls in metal or wood frame construction. Appropriate for residential, commercial and industrial buildings.

## Benefits of AAC

- load bearing and non-load bearing
- sustainable
- thermal insulation
- superior fire resistance
- high strength at low density
- speed of construction
- excellent workability
- termite and pest resistant

**Structural AAC precast elements are available up to 20 ft length.**

Dimensions	
Thickness <sup>1,3</sup>	2 and 3 in
Length <sup>2</sup>	8 and 10 ft
Width <sup>2</sup>	24 in

1) (2) (3) Tolerance  $\pm 1/8"$ , Tolerance  $3/16"$ , Nominal.  
Manufactured according to ASTM C1452, ASTM C1693.

Fire Performance		
AAC Panel	Fire Rating Hrs Number	UL Design
Panel 3" Metal / Wood Frame Assembly	1	U358
	2	V420
	3	U208
Panel 2" Metal / Wood Frame Assembly	2-4	U212, U205
	2	U213, U214

Note: Testing performed at Underwriters Laboratories, Inc. under ASTM E119 (ANSI/UL 263) "Fire Test Building Constructions and Materials".

Acoustic Performance		
AAC Panel	STC	Report Number
ACC Panel 3" (without finishes)	36	STORK 23816

Note: Testing performed at Stork Twin City Testing Corporation, Saint Paul, MN in accordance with ASTM E (90) Standard Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.

Physical and Design Properties		
Characteristic	Unit	AAC-4 Class
Minimum Compressive Strength	lb/in <sup>2</sup>	580
Design Weight (1)	lb/ft <sup>3</sup>	37
Nominal Density	lb/in <sup>3</sup>	31
Drying Shrinkage	%	< 0.02

(1) Values consider material's moisture content.

Thermal Conductivity
0.91 BTU-in/ft <sup>2</sup> h°F

Units: BTU=British thermal unit, in=inches, ft<sup>2</sup>=square feet, h=hour, °F=Fahrenheit



**... the perfect choice**

## **Production plants for AAC panels and blocks**

economic - sustainable - efficient

### **WEHRHAHN SERVICES:**

- Mechanical and electrical design
- Manufacturing
- Supervision of installation
- Commissioning and start-up
- Remote service
- Training
- Support
- Laboratory services

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