

Hebel Fire Walls

Masonry solutions to increase speed of construction and performance.



 **hebel**
aerated
concrete



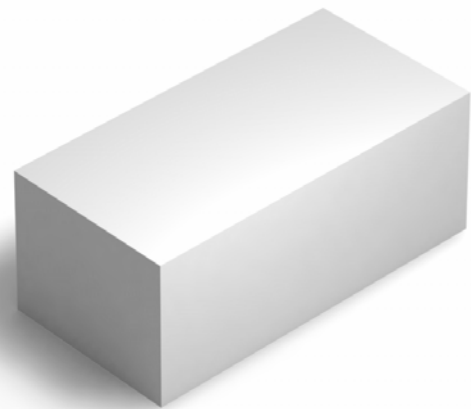
Hebel block walls have a 4 hour fire rating.

Visit www.buildwithhebel.com to view the ASTM E119 test.

- Hebel are Autoclaved Aerated Concrete
- Thickness of 4", 6" or 8" blocks
- ASTM C 1386
- Hebel Thin Bed Mortar

- 4-Hour Fire Rating
- Thermal and Sound Insulator
- Impervious to Pests and Termites
- No Need for Dry Storage
- Lightweight
- Reduced Number of Inspections

ANSI/UL 263 4 Hour Fire Ratings:	Minimum AAC Block Thickness
U919	4"
U917	6"
U921	6"
U916	8"



877-41-43235

www.buildwithhebel.com

Xella Aircrete North America, Inc.
2400 Hebel Boulevard
Adel, GA 31620

**BXUV.U919
Fire Resistance Ratings - ANSI/UL 263**

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Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

Fire Resistance Ratings - ANSI/UL 263

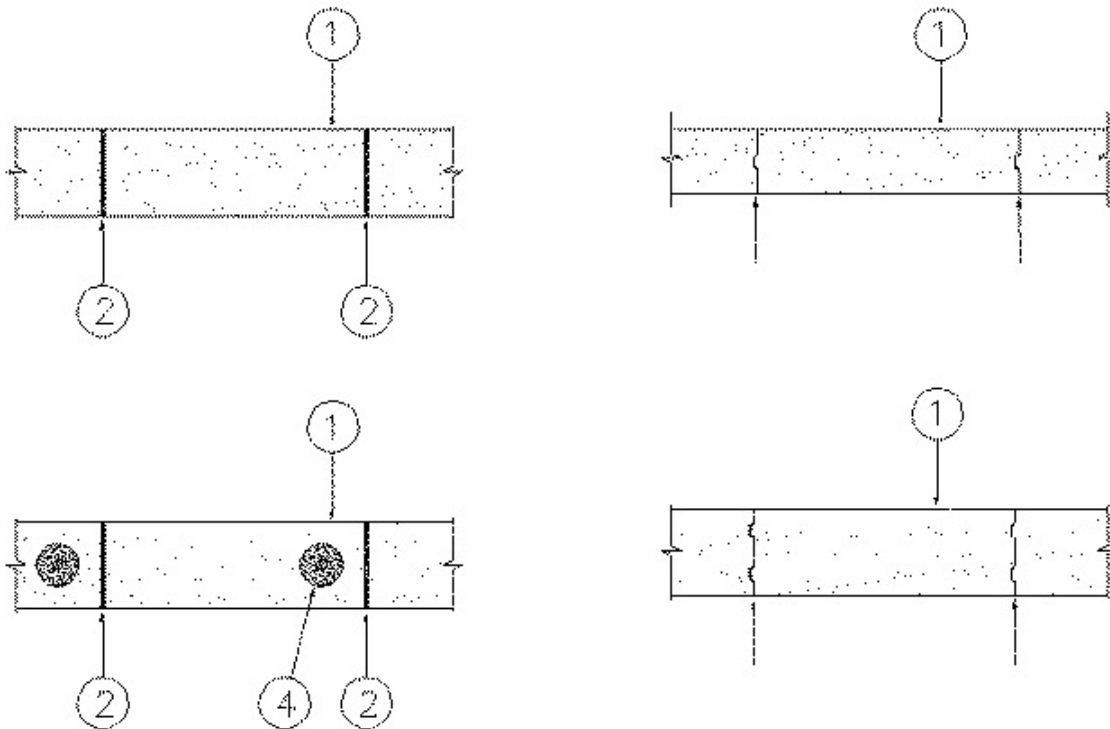
See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. U919

May 31, 2007

Bearing Wall Rating — 4 Hr

Nonbearing Wall Rating — 4 Hr



1. **Precast Autoclaved Aerated Concrete Blocks** — Min 4 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks for use in 4 hr nonbearing wall assemblies. Min 6 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks for use in 4 hr bearing wall assemblies. Min 3 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks for use in 2 hr nonbearing wall assemblies. Min 8 in. thick for cored block.

AERCON FLORIDA L L C — AC-2, AC-4, AC-6

XELLA MEXICANA S A DE C V — AAC -2 , AAC-4, AAC-6

E-CRETE L L C — AAC-2, AAC-4, AAC-6

XELLA AAC TEXAS INC — AAC- 2 , AAC-4, AAC-6

XELLA AIRCRETE NORTH AMERICA INC — AAC-2.5, -3.5, -5.0, -7.5

2. **Thin Bed Mortar** — Blocks laid in a ANSI A118.4 Latex/Portland cement thin bed mortar installed with vertical joints staggered. Thin bed mortar is optional in 8 in. thick blocks with tongue and groove joints for nonbearing walls.

3. **Precast Autoclaved Aerated Concrete Lintel (Not Shown)*** — Min 6 in. thick lintel for use in bearing and nonbearing wall assemblies.

AERCON FLORIDA L L C

XELLA MEXICANA S A DE C V

E-CRETE L L C

XELLA AAC TEXAS INC

4. **Core** — (Optional) As an option, min 8 in. thick blocks may have a max 4 in. diam core with a max. #7 (7/8 in.) rebar and filled with ASTM C404 grout. Max of one core per block.

*Bearing the UL Classification Mark

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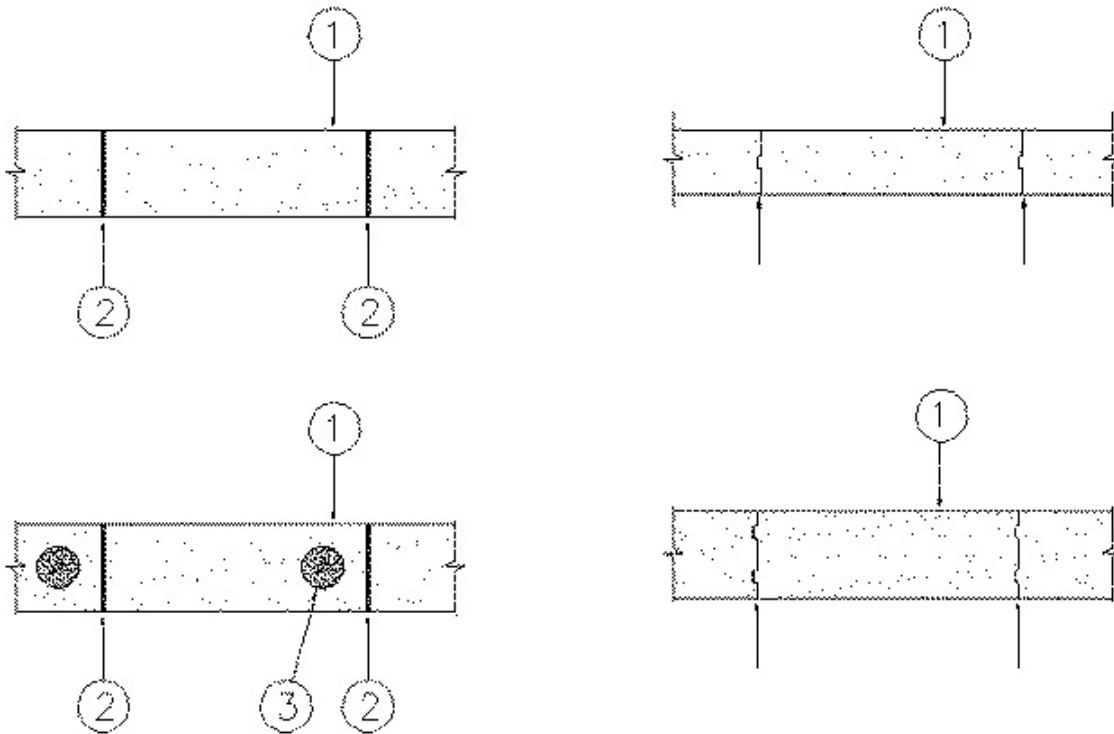
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Design No. U917

May 31, 2007

Bearing Wall Rating — 4 Hr

Nonbearing Wall Rating — 4 Hr



1. **Precast Autoclaved Aerated Concrete Blocks** — Min 6 in. thick by 7-7/8 in. high by 23-5/8 in. long blocks. Min 8 in. thick for cored block.

AERCON FLORIDA L L C — AC-2, AC-4, AC-6

E-CRETE L L C — AAC-2, AAC-4, AAC-6

XELLA AIRCRETE NORTH AMERICA INC — AAC-2.5, -3.5, -5.0, -7.5

2. **Thin Bed Mortar** — Blocks laid in a ANSI A118.4 Latex/Portland cement thin bed mortar installed with vertical joints staggered. Thin bed mortar is optional in 8 in. thick blocks with tongue and groove joints for nonbearing walls.
3. **Core** — (Optional) As an option, min. 8 in. thick blocks may have a max. 4 in. diameter core with a max. #7 (7/8 in.) rebar and filled with ASTM C404 grout. Maximum of one core per block.

*Bearing the UL Classification Mark

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Fire Resistance Ratings - ANSI/UL 263

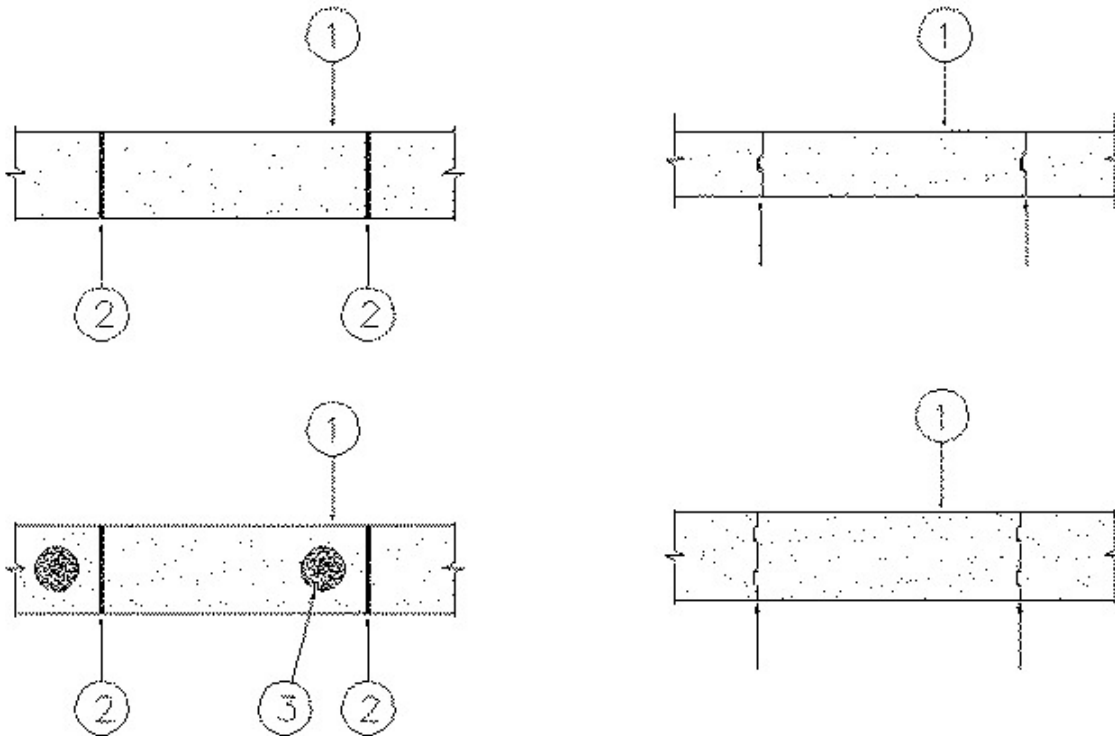
See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. U921

May 31, 2007

Bearing Wall Rating — 4 Hr

Nonbearing Wall Rating — 4 Hr



1. **Precast Autoclaved Aerated Concrete** — Min 6 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks. Min 8 in. thick for cored block.

AERCON FLORIDA L L C — AC-2, AC-4, AC-6

E-CRETE L L C — AAC-2, AAC-4, AAC-6

XELLA AIRCRETE NORTH AMERICA INC — AAC-2.5, -3.5, -5.0, -7.5

2. **Thin Bed Mortar** — Blocks laid in a polymer modified cementitious thin bed mortar. Blocks installed with vertical joints staggered. Thin bed mortar is optional in 8 in. thick blocks with tongue and groove joints for nonbearing walls.

3. **Core** — (Optional) As an option, min 8 in. thick blocks may have a max 4 in. diam core with a max. #7 (7/8 in.) rebar and filled with ASTM C404 grout. Max of one core per block.

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Fire Resistance Ratings - ANSI/UL 263**

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Fire Resistance Ratings - ANSI/UL 263

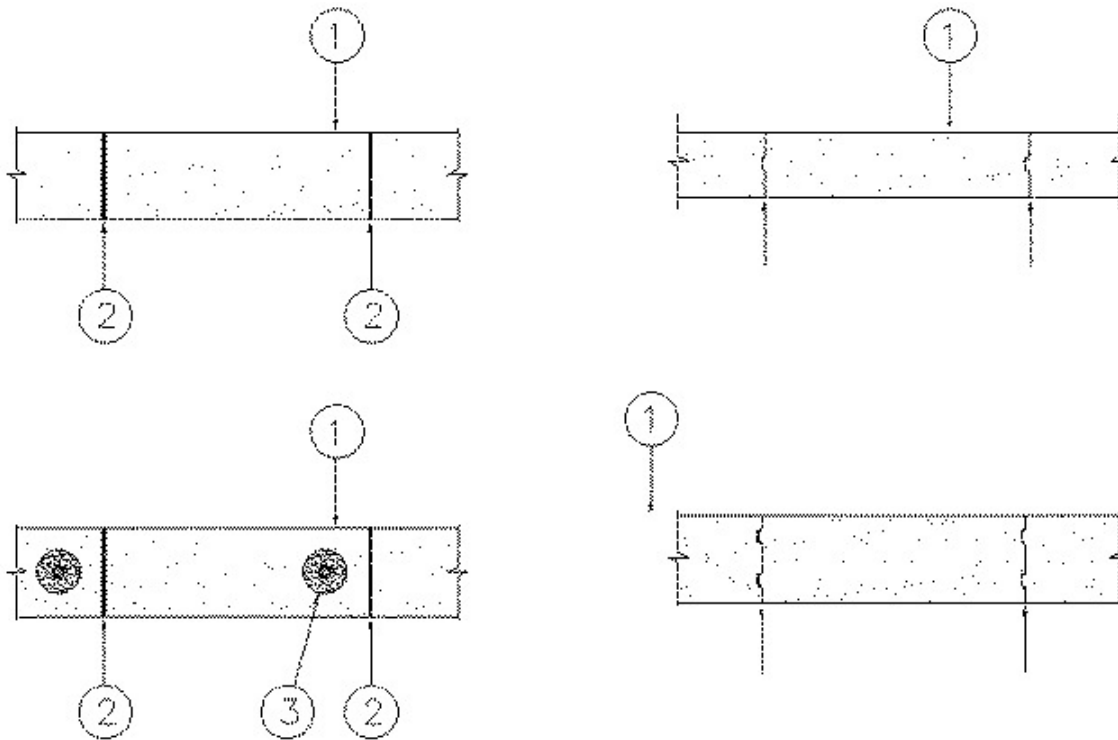
See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. U916

May 31, 2007

Bearing Wall Rating — 4 Hr

Nonbearing Wall Rating — 4 Hr



1. **Precast Autoclaved Aerated Concrete Blocks** — Nom 8 in. thick by 24 in. high by 40 in. long blocks.

AERCON FLORIDA L L C — AC-2, AC-4, AC-6

E-CRETE L L C — AAC-2, AAC-4, AAC-6

XELLA AIRCRETE NORTH AMERICA INC — AAC-2.5, -3.5, -5.0, -7.5

2. **Thin Bed Mortar** — Blocks laid in a ANSI A118.4 Latex/Portland cement thin bed mortar installed with vertical joints staggered. Thin bed mortar is optional in blocks with tongue and groove joints for nonbearing walls.

3. **Core** — (Optional) As an option, min. 8 in. thick blocks may have a max. 4 in. diameter core with a max. #7 (7/8 in.) rebar and filled with ASTM C404 grout. Maximum of one core per block.

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SECTION 04240

AUTOCLAVED AERATED CONCRETE UNITS

Date: 04-19-07

SECTION REQUIRES EDITOR TO MAKE SELECTIONS - GENERALLY SELECTIONS ARE PRECEDED BY **. SPEC EDITOR TO DELETE INAPPROPRIATE INFORMATION.

PART 1 – GENERAL

SELECT APPROPRIATE SECTIONS FOR BELOW; DELETE OTHERS

1.01 SUMMARY

- A. Section includes, but is not limited to: Fabrication, transportation, and erection of Autoclaved Aerated Concrete (AAC) units.
- B. Related sections:
 - 1. Section 01630: Product Substitution Procedures.
 - 2. Section 03200: Concrete Reinforcement.
 - 3. Section 03300: Cast-in-Place Concrete.
 - 4. Section 04070: Masonry Grout.
 - 5. Section 04210: Brick.
 - 6. Section 07600: Flashing and Sheet Metal.
 - 7. Section 07650: Flexible Flashing.
 - 8. Section 07840: Firestopping.
 - 9. Section 07920: Joint Sealants.
 - 10. Section 08110: Steel Doors and Frames.
 - 11. Division 9: Finishes
 - 12. Division 15: Mechanical.
 - 13. Division 16: Electrical.

1.02 REFERENCES

- A. Standards of the following as referenced:
 - 1. American Concrete Institute (ACI).
 - 2. American Society for Testing and Materials (ASTM).
 - 3. The Masonry Society (TMS).
 - 4. Underwriters Laboratories, Inc. (UL)

1.03 DEFINITIONS

- A. Terms:
 - 1. AAC unit: Autoclaved Aerated Concrete Unit.
 - 2. Bed joint: Horizontal mortar joint between two AAC units.
 - 3. Head joint: Vertical joint between two AAC units.
 - 4. Jumbo block: Nominally square face size AAC unit, 24" (60.8cm) by 24" (60.8) cm.
 - 5. Standard block: Nominally rectangular face AAC unit 24" (60.8cm) by 8" (20cm).
 - 6. Strength Class: AAC2, AAC4, or AAC6.

1.04 SUBMITTALS

- A. Quality control submittals:

1. Certificate from the AAC manufacturer indicating AAC product is manufactured in accordance with ASTM C1386.

1.05 QUALITY ASSURANCE

- A. Furnish AAC units from single manufacturer.
- B. Mock-ups:
 1. Lay 6'-0" long by 4'-0" high sample wall with AAC units. Orient wall as directed by Architect.
 2. The following items are to be approved:
 - a. Mortar joints.
 - b. Control joint complete with joint sealant.
 - c. Workmanship.
 - d. Reinforcement, if required.
 - e. Flexible flashing.
 - f. Exterior finishes.
 - g. Interior finishes.
 3. Prepare sample wall at least 14 days prior to beginning AAC unit work. Should wall be disapproved, prepare additional walls until approved by Architect.
 4. Maintain wall throughout work as standard of AAC unit work. Do not destroy wall until directed by Architect.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Storage and protection:
 1. Offload AAC units with pallets resting on ground. Placing AAC units in direct contact with earth is prohibited.
 2. Protect AAC units from oil and chemical staining.

1.07 PROJECT CONDITIONS

- A. Cold and hot weather installation practices:
 1. Cold weather precautions for AAC masonry work:
 - a. When temperature of AAC units is below 20°F, do not install.
 - b. Remove visible ice on AAC units prior to installation.
 - c. Heat mortar sand or mixing water to produce mortar temperatures between 40°F. and 120°F. at time of mixing. Maintain mortar temperature above freezing until placed.
 - d. Ambient temperature requirements:
 - 1) Between 25°F. and 20°F.: Use heat sources on both sides of AAC walls under construction. Install wind breaks when wind velocity is in excess of 15 mph.
 - 2) Below 20°F.: Provide enclosure for AAC walls under construction. Use heat sources to maintain temperatures above 32°F. within enclosures.
 - e. Daily mean temperature requirements:
 - 1) Between 40°F. and 32°F.: Protect completed AAC walls from rain or snow by covering with weather resistive membrane for a minimum of 24 hours after construction.
 - 2) Between 32°F. and 25°F.: Completely cover completed AAC walls with weather resistive membrane for a minimum of 24 hours after construction.
 - 3) Between 25°F. and 20°F.: Completely cover completed AAC walls with insulating blankets or equal protection for a minimum of 24 hours after construction.
 - 4) Below 20°F.: Maintain AAC wall construction above 32°F. for 24 hours after completion by enclosure with supplementary heat, electric heating blankets, infrared heat lamps, or other acceptable methods outlined to Architect.
 2. Hot weather precautions for AAC masonry work:
 - a. When erected in ambient air temperature of 100°F. or ambient air temperature of 90°F.

with wind velocity in excess of 8 mph, implement the following:

- 1) Protect AAC wall construction from direct exposure to wind and sun.
- 2) Spreading mortar beds more than 4'-0" ahead of AAC units is prohibited.
- 3) Setting AAC unit more than one minute after spreading mortar is prohibited.

1.08 SEQUENCING AND SCHEDULING

- A. Loading AAC unit walls or columns is prohibited prior to the following:
1. Uniform floor or roof loads: 12 hours, minimum.
 2. Concentrated loads: Three days, minimum.
- B. Construction activities coordination specified in other Sections for work built into walls:
1. Work required under this Section includes chase and routing coordination with construction activities specified in other Sections.
 2. As walls are completed, coordinate with work required in other Sections for chases or routing areas required in AAC walls for electrical, plumbing, and other items.
 3. Request relevant construction activities to mark actual routing or chase locations; include required depth.
 4. Filling in chases and routed areas specified in other Sections.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers:
1. Acceptable manufacturer: Xella Aircete North America Inc.; 2400 Hebel Boulevard, Adel, Georgia 31620; Telephone: 229.896.1593; Fax 229.896.1912

TYPICALLY, USE BELOW IF CLOSED SPEC

2. Substitutions for products listed are prohibited.

USE THIS SUBPARAGRAPH FOR ALLOWING SUBSTITUTIONS WITHOUT NAMING OTHER MFRS.

3. Products of other manufacturers similar in type, quality, and performance are acceptable, subject to compliance with specified ** requirements.
** requirements and submission of required data indicated in Product Substitution Procedures section.

2.02 MANUFACTURED UNITS

- A. AAC units:
1. Composition: Autoclaved aerated concrete mixture consisting of quartz, sand, lime, cement, proprietary additives, and water.

SELECT APPROPRIATE THICKNESS (ES) AND USE; DELETE OTHERS; SEVERAL DIFFERENT WALL THICKNESSES REQUIRE MULTIPLE SELECTION. SELECT STRENGTH CLASS (ES) REQUIRED.

2. Nominal dimensions: **
 - a. Tongue and Groove Block: ** 4" (10cm) ** 6" (15cm) ** 8" (20cm) ** 10" (25cm) ** 12" (30cm) nominal widths by 8" (20cm) nominal height by 24" (60.8cm) nominal length; Strength class ** AAC2 ** AAC4 ** AAC6
 - b. Standard Block; square head joints: ** 3" (7.5cm) ** 4" (10cm) ** 6" (15cm) ** 8" (20cm) ** 10" (25cm) ** 12" (30cm) nominal widths by 8" (20cm) nominal height by

- 24" (60.8cm) nominal length; Strength class ** AAC2 ** AAC4 ** AAC6
- c. Jumbo Block: ** 6" (15cm) ** 8" (20cm) ** 10" (25cm) ** 12" (30cm) nominal widths by 24" (60.8cm) nominal height by ** 40" (101.6cm) ** 48" (121.9cm) nominal length; Strength class ** AAC4 ** AAC6
 - d. Shaft Block: ** 3" (7.5cm) ** 4" (10cm) nominal widths by 24" (60.8cm) nominal height by 24" (60.8cm) nominal length; Strength class ** AAC2 ** AAC4

SELECT APPROPRIATE LINTEL TYPE – SOLID REINFORCED TYPE OF “U” TYPE

- e. Solid lintel units; reinforced: Same width as walls by ** 8" (20cm) ** 12" (30cm) ** 16" (40.3cm) ** 24" (60.8) ** nominal height; Strength class AAC4.
- f. Lintel “U-Block” units: Same width as walls by 10" (25cm) nominal height by 24" (60.8cm) nominal length; Strength class AAC4.

B. Fire ratings: In accordance with Underwriters Laboratories listed assemblies.

2.03 ACCESSORIES

A. Mortar materials:

- 1. AAC unit head joint and bed joint mortar; acceptable product: Xella Aircrete North America Inc.; HEBEL Thin Bed Mortar and/or HEBEL Large Grain Mortar.
- 2. Leveling bed mortar: ASTM C270, Type “M”.
- 3. Aggregate:
 - a. Leveling bed mortar: Clean, hard, natural, washed sand in accordance with ASTM C144.

DELETE SUBPARAGRAPH BELOW IF NO CEMENT GROUT IS REQUIRED.

- a. Masonry grout:
 - Fine aggregate: ASTM C404, Size No. 1
 - Coarse aggregate: ASTM C404, Size No. 89.
 - 4. Water: Clean, potable, free from deleterious amounts of alkalies, acids, and organic materials.
- B. Bond beam reinforcement: ASTM A615, Grade 60 deformed type for #3 and larger bars; actual sizes indicated on Contract Drawings.
- C. Backer rods and sealants: Specified in Joint Sealants Section.
- D. Flexible flashing: Specified in Flexible Flashing Section.
- E. Fire-rated insulation for penetrations of rates walls: Specified in Firestopping Section.
- F. Tension tie-downs; acceptable manufacturer: Go-Bolt, Inc.; DeLand, Florida or equivalent.
- G. Fasteners and Anchors: Compatible with AAC materials.

2.04 MIXES

A. Mortar proportions:

- 1. ACC unit head joint and bed joint mortar: Mix in accordance with manufacturer’s mixing instructions.
- 2. Proportion materials by volume in accordance with ASTM C270 for leveling course only. Use AAC thin-bed mortar for head and bed joints and other joints in AAC work.

DELETE GROUT PROPORTIONS PARAGRAPH IF DELETED ABOVE.

- B. Grout proportions:
1. Fine and Coarse Grout: Proportion materials by volume in accordance with ASTM C476.
 2. Slump: 8" to 11" measured in accordance with ASTM C143.

PART 3 - EXECUTION

3.01 PREPARATION

A. Protection:

1. Keep walls dry during erection by covering at end of each work period with non-staining waterproof membrane covering.
2. Protect partially completed walls not being worked on with non-staining waterproof membrane until construction activities specified in other sections completes protection of walls.
3. Covering: Overhang at least 2'-0" on each side of wall; anchor on each side of wall.
4. Protect finished exposed work from stains.
5. Take particular care to keep AAC units clean.
6. Brace walls during construction to protect from wind damage.

3.02 INSTALLATION

A. Workmanship:

1. Lay AAC units plumb, level, and true to line for range.
2. Lay units in running bond with 4" minimum head joints lap in alternate courses.
3. Cut AAC units with unit manufacturer recommended hand type saw or electric bandsaw specially designed for cutting AAC units. **Lay out units to minimize cutting.**

B. Building in other work:

1. Install work of other sections required to be incorporated with AAC units as work progresses; include anchors, and accessories. Space and align built-in parts; exercise care not to disturb other materials from position.
2. Coordinate with SEQUENCING AND SCHEDULING Article for required routing and chases.
3. Fill in interior spaces around built-in items with fine grout or interior plaster.
4. Fill in exterior spaces around built-in items with fine grout or stucco.
5. Fill hollow metal frames in AAC unit walls with fine grout as wall is laid. Rake back 1/2" joint between hollow metal frame and adjacent AAC unit to receive sealant at butt type frames.

C. Mortar joints:

1. Head and bed joints:
 - a. Lay first course in full bed of leveling bed mortar in thickness necessary to level AAC unit top; not less than 1/2".
 - b. Apply AAC unit head joint and bed joint mortar on full face of AAC unit already laid.
2. Make adjustment while mortar is still soft and plastic by tapping to plumb and bringing to alignment.
3. Check each AAC unit as laid with mason's level for level and plumb with wall below.
4. Remove and replace mortar with fresh mortar, where adjustment must be made after mortar has started to set.
5. Keep bed and head joints uniform in width.
6. Standard thickness for both horizontal and vertical mortar joints:
 - a. Base course bed joint: 1/2", nominal, +/- 1/4".

- b. Other vertical coursing and head joints: 1/16", nominal.
- 7. Take particular care to avoid spreading mortar on exposed face of AAC unit. Only normal mortar droppings will be accepted on face of AAC unit; remove only after mortar has dried enough not to smear.

D. Grout Filled Cells

1. Provide a clean-out opening at the base of the AAC wall at each vertical reinforcing bar locations.
2. Remove debris through-out from core area prior to placement of concrete grout.
3. Pre-wet the core cells with clean water prior to placement of concrete grout.
4. Fill core cell with concrete grout using appropriate lift procedures to avoid wall blow-outs.
5. Consolidate the grout filled core with a needle vibratory device.

E. Flexible flashing:

1. Clean AAC unit surfaces smooth; maintain free from projections capable of puncturing flashing material.
2. Follow requirements indicated in Flexible Flashing Section.

F. Joint treatment: Remove excess extruded mortar immediately after laying AAC unit; tooling joints is not required.

G. Control joints:

1. Make joint 1/2" wide, unless indicated otherwise, rake out control joints to depth of 3/4" while mortar is still plastic.
2. Provide joints at 24'-0" O.C. unless otherwise indicated.
3. Leave joint open and clean for caulking in accord with Joint Sealants Section.

H. Tolerances:

1. Maximum variation from plumb: 1/4" in 10'-0"; not exceeding 3/8" in 20'-0".
2. Maximum variation from level: 1/4" in 20'-0", not exceeding 1/2" in 49'-0" or more.
3. Maximum variation in linear building line from location indicated: 1/4" in 20'-0".

3.03 CLEANING AND PATCHING

A. Keep AAC unit work free of mortar droppings as work progresses and, at completion of work, rub AAC unit to remove excess mortar

B. Patch AAC units with excessive spalls or chips.

END OF SECTION 04240



Material Safety Data Sheet

AUTOCLAVED AERATED CONCRETE (AAC)

SECTION I. PRODUCT IDENTIFICATION

Product Name: HEBEL - Autoclave Aerated Concrete (AAC)

Product Use: Construction block for walls, slab and floor panels, wall panels, AAC Board, lintels.

Manufacturer's Information: Xella Aircrete North America Inc.
2400 Hebel Boulevard
Adel, Georgia 31620

Telephone (s): 229.896.1593 (Tel)
229.896.1912 (Fax)

SECTION II. HAZARDOUS INGREDIENTS

COMPONENT	CAS No.	% by Weight	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Portland Cement	65977-15-1	28	5	10
Silica	14808-60-7	50	0.1	0.1
Lime	39445-23-3	12	5	10
Gypsum	7778-18-9	10	5	10
Expanding Agent	PATENTED	0.1 - 0.15	--	--

SECTION III. PHYSICAL DATA

Boiling Point :	N/A	Specific Gravity:	0.5-0.7
Vapor Pressure:	N/A	Evaporation Rate:	N/A
Vapor Density (Air=1):	N/A	Melting Point:	N/A
Solubility in Water (%wt)	N/A	Volatiles (by vol.):	N/A
pH:	9.0-10.5	VOC's (g/lit)	N/A
Appearance and odor:	White solid with no odor		

SECTION IV. FIRE AND EXPLOSION HAZARDS

Flash Point : N/A
Flammability (LEL,HEL) N/A
Hazardous combustion products: None
Unusual fire and explosion hazards: None
Special Firefighting procedures: The applicable for surrounding materials and substances

SECTION V. REACTIVITY DATA

Stability:	Stable
Conditions to avoid:	None
Incompatible materials:	None, this is an inert material
Hazardous decomposition products:	None
Hazardous polymerization:	Will not occur

SECTION VI. HEALTH HAZARD DATA

EFFECTS OF ACUTE OVEREXPOSURE:

No acute effects are related to the use of this product.

EFFECTS OF CHRONIC OVEREXPOSURE:

Long-term overexposure to high concentrations of dust without the use of a dust mask may reduce respiratory function in some individuals.

INHALATION:

When cutting the material, dust particles are generated. Respiratory tract must be protected. Irritation of nose and upper respiratory tract, shortness of breath. Prolonged inhalation of excessive silica dust may reduce lung function.

EYES:

No specific health hazards are related to this route of exposure. When cutting the material, eyes must be protected against dust generated.

SKIN:

Handling may cause dry skin. Avoid contact to skin.

INGESTION:

Not applicable under normal use. May result in obstruction and temporary irritation of the digestive tract if large quantities are consumed.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Unknown

SECTION VII. FIRST AID MEASURES

INHALATION:

Remove to fresh air. If persistent irritation, severe coughing, or breathing difficulty occurs seek medical attention.

EYE CONTACT:

Remove contact lenses. Flush eyes, including under eyelids, with large amounts of water for 15 minutes. If irritation persists, seek medical attention.

SKIN CONTACT:

Wash affected areas with soap and water. If irritation persists seek medical attention.

INGESTION:

May result in obstruction if ingested. Seek medical attention.

SECTION VIII. SPECIAL PROTECTION

RESPIRATORY PROTECTION:

Dust mask must be worn for dust generating operations.

PROTECTIVE GLOVES:

As recommended for construction operations.

EYE PROTECTION:

Use of protective safety glasses or goggles is recommended for dust generating operations.

SECTION IX. ADDITIONAL INFORMATION

AAC dust contains crystalline silica which has been evaluated as Group 2A (probably carcinogenic to humans) by the International Agency for Research on Cancer (IARC).

WASTE DISPOSAL

Follow the above safety instructions, collect waste and dust by sweeping or vacuuming and place in containers. Dispose of containers and waste according to local, state or federal regulations.

The information contained in this material Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information or the use of the product since the conditions of use are beyond manufacturer's control. Nothing contained herein should be construed as a recommendation to use this product in conflict with existing patents covering any material or its use.

This MSDS was generated from information available of components of this product. It complies with minimum requirements stated by OSHA as defined in Section G, 29CFR1910.1200.



HEBEL THINBED MORTAR

Polymer Modified AAC Adhesive Cement

HEBEL THINBED MORTAR is a polymer modified, white portland cement adhesive specifically designed to bond autoclaved aerated concrete units for interior and exterior wall construction.

Surface Preparation: All bases to receive **HEBEL THINBED MORTAR** must be clean, dry, and free of grease, oil, dirt, paint, and any foreign residues.

Mixing: Mix one 55 pound bag with approximately 1 3/4 gallons of clean water for 5 minutes and remix prior to use. The desired consistency is that which allows the mortar to flow easily through a notched trowel.

Application: Apply to autoclaved aerated concrete using an appropriately sized notched trowel. Deposit the proper amount of **HEBEL THINBED MORTAR** along the center of the horizontal surface to evenly distribute the mortar over the surface. Use the trowel to directly apply mortar to the vertical surface, drawing it from the bottom to the top of the block. Once set, the joint thickness should be approximately 1/16 to 3/32 inch. The mortar allows approximately 5 minutes for straightening and adjustment of the unit before it begins to set.

Precautions: Ambient and surface temperatures must be higher than 40° F and not expected to fall below 40° F within 24 hours. Protect from rain until completely hard.

Drying Time: Total cure obtained in 24 hours.

Package Size: 55 pound bag

Cleaning: Clean tools with water. Protect glass, metal, stone, brick and other area from contact with plaster.

Coverage: One 55 pound bag covers one pallet of autoclaved aerated concrete.

Storage: Product storage life is one year from date of manufacture.

Technical Data:

Compressive Strength	1800 psi
Dry Density	89 lbs/cf
Wet Density	108 lbs/cf
Shear Bond Strength ASTM C1072	85psi* block failure



I. Product Identification			
Product Name	Hebel Thinbed Mortar	Manufacturers Name	Elite Building Products, Inc. 4235 Buford Highway Duluth, GA 30096
		Phone (678) 206-0242	

II. Hazardous Ingredients			
Material	CAS No.	OSHA PEL: mg/m ³	ACGIH TLV mg/m ³
Portland Cement	65977-15-1	5	10
Silica	14808-60-7	0.1	0.1
Vinyl	1216-01	5	10

III. Health Hazard Data	
Routes of Hazard	Basis for Determination
<u>Exposure Determination</u> Inhalation	Contains Silica* * Prolonged inhalation of excessive silica dust may reduce lung function.
Effects of Acute Overexposure	No acute effects.
Effects of Chronic Overexposure	Long term overexposure to high concentrations of this dust without the use of a dust mask may reduce respiratory function in some individuals.
Medical Condition Aggravated by Exposure	Unknown
Eyes and Skin	No special precautions. Flush with water for 15 minutes.
Inhalation and Ingestion	No special precautions.

IV. Physical Data			
Boiling Point	N/A	pH	12
Vapor Pressure	N/A	Specific Gravity	2.8
Vapor Density	N/A	Melting Point	N/A
Solubility in Water	Negligible	Evaporation Rate	N/A
Appearance and Odor	Whiteish		

V. Fire and Explosion Data

Flash Point	None	Special Fire Fighting Procedures	None
Flammable Limits in Air	N/A	Unusual Fire and Explosion Hazard	None
Auto Ignition Temperature	None		

VI. Reactivity Data

Conditions Contributing to Instability	Reacts with acids to liberate CO ₂
Conditions Contributing to Hazardous Polymerization	None
Hazardous Decomposition Products	None

VII. Disposal, Spill, or Leak Procedures

Waste Disposal Method	Material is not classified as a hazardous waste under RCRA Section 3001. Use normal solid waste disposal procedures which are in compliance with Federal, State and Local Regulations.
Spill or Leak Procedures	Material is not classified as a toxic pollutant or a hazardous substance under Section 307 and 311 of the Clean Water Act. Accidental releases can be cleaned up by sweeping, vacuuming, or flushing with water.
Neutralizing Chemicals	None required.

VIII. Special Protection Information

Ventilation	Use sufficient general area ventilation. Local exhaust may be necessary where Threshold Limit Values (TLV's) are exceeded or dusty conditions exists.
Personal Protective Equipment	
Eyes	Recommended
Gloves	Recommended
Other	None
Respiratory Protection	For dusty conditions use a dust mask approved by NIOAH.

The information contained in this Material Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information or the use of the product since the conditions for use are beyond our control. Nothing contained herein should be construed as a recommendation to use this product in conflict with existing patents covering any material or its use.