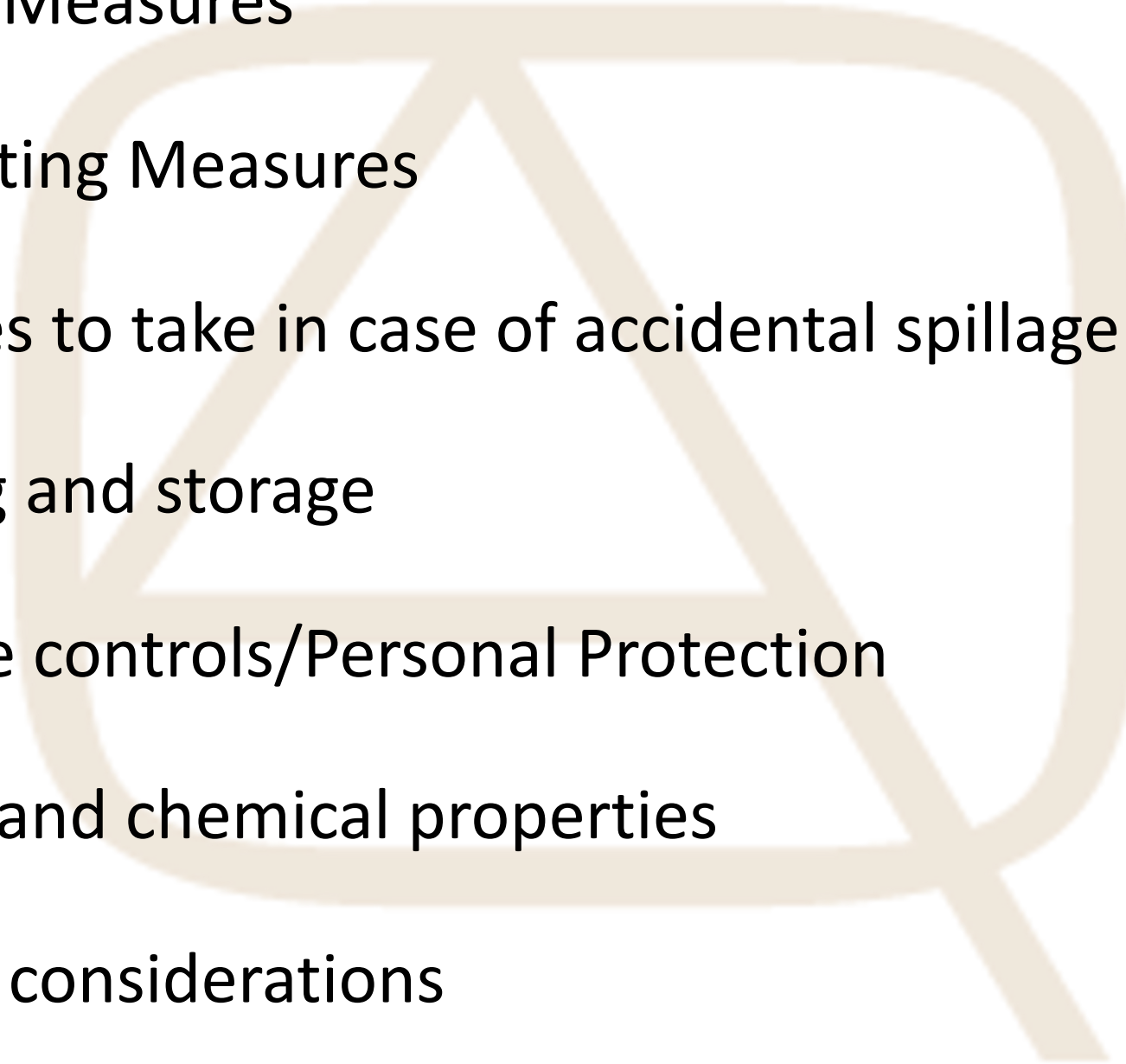


Safety Data Sheet

- Identification of the substance
 - Hazard Identification
 - First Aid Measures
 - Fire Fighting Measures
 - Measures to take in case of accidental spillage
 - Handling and storage
 - Exposure controls/Personal Protection
 - Physical and chemical properties
 - Disposal considerations
 - Transportation information
- 

Product Identification Sold as: American Quartz

Identity of the substances that contribute to the mixture classification:
Crystalline silica (SiO₂) (quartz, cristobalite)

Relevant identified uses of the substance or mixture and non-recommended uses.

Identified uses: Construction and decoration surface intended for **indoor uses**, primarily as a countertop in kitchens and baths, wall siding and other similar uses.

Contraindicated uses: Do not mechanically process the material using a dry method; avoid producing dust.

Information on manufacturer and provider of safety data sheet

Manufacturer: American Quartz Max Corp

2957 Lenwood Road, Barstow, CA 92311

Tel: (760) 957-8888

Info@americanquartz.com | www.americanquartz.com

Substance or mixture classification

Crystalline silica content: 88-90%

If you need a more precise crystalline silica content of specific products, please contact the manufacturer.

Titanium dioxide (TiO₂) content: 0-2%

American Quartz contains crystalline silica (SiO₂), as quartz or cristobalite, dust particles may be generated during the mechanical processing or preparation of American Quartz (cutting, shaping, perforation, engraving, etc.) these particles, which include respirable crystalline silica, may remain suspended in the air, Large-scale inhalation of this portion of mineral dust and crystalline silica can cause serious illnesses, including pneumoconiosis, pulmonary fibrosis (silicosis), lung cancer, chronic obstructive pulmonary disease (COPD) and kidney disease.

The finished material has been certified by the Greenguard Environmental Institute as a material that meets indoor air quality standards for volatile organic compounds. The material has also received other certifications attesting to its harmlessness to human health, including an LGA hygiene tested certificate and an NSF international certificate guaranteeing the material is food-safe.

Hazard statements

Causes damage to organs (Lung) through prolonged or repeated exposure via inhalation

May cause cancer by inhalation

May cause respiratory irritation.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood

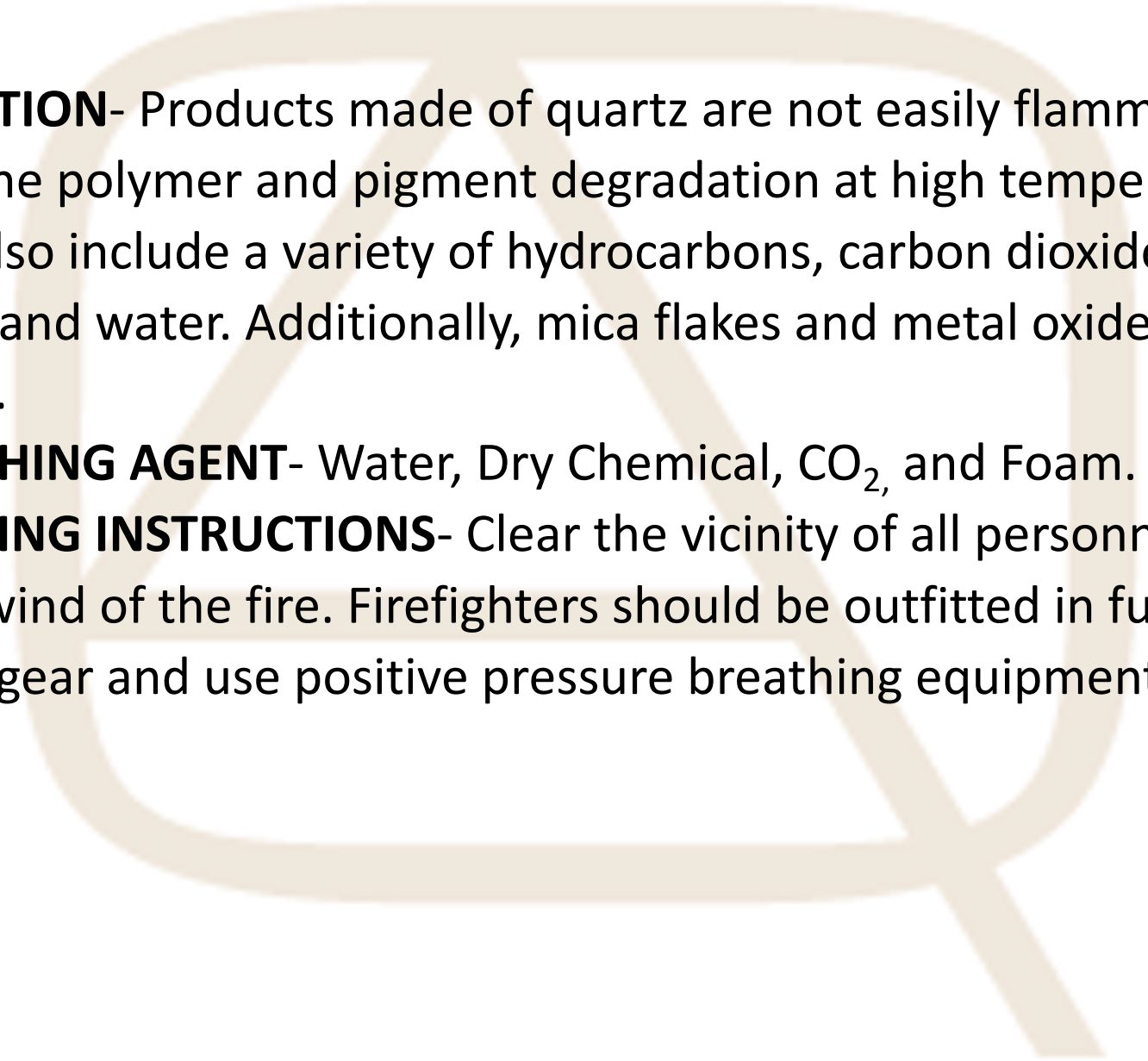
Do not breathe dust

Wash hands and face thoroughly after handling

Do not eat, drink or smoke when process this product

Wear respiratory protection for particle filtering (at least P3 or N95)

- **Eye Exposure-** Immediately flush eyes with water continuously for a minimum of 15 minutes. If irritation persists after flushing, seek medical attention.
- **Skin Exposure-** Wash exposed skin with soap and water. Carefully remove contaminated clothing, taking care not to contaminate eyes. Seek medical attention if rash or adverse effects occur.
- **Inhalation-** Remove the individual from the affected space and take to an area with FRESH AIR. If breathing becomes difficult, or has stopped, perform emergency rescue procedures, call emergency services, and seek first aid.
- **Ingestion-** Not applicable for finished intact engineered stone product BUT if raw material is swallowed, seek medical attention or advice

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- **AUTO IGNITION**- Products made of quartz are not easily flammable. The results of the polymer and pigment degradation at high temperatures, however, also include a variety of hydrocarbons, carbon dioxide, carbon monoxide, and water. Additionally, mica flakes and metal oxide fumes might be emitted.
 - **EXTINGUISHING AGENT**- Water, Dry Chemical, CO₂, and Foam.
 - **FIRE FIGHTING INSTRUCTIONS**- Clear the vicinity of all personnel and remain upwind of the fire. Firefighters should be outfitted in full fire protection gear and use positive pressure breathing equipment.

- Although the product does not pose a risk of spillage; in the event of a slab breaking, be sure to handle broken pieces with industrial gloves. Waste pieces should be disposed of properly by local, state and federal guidelines.
- Avoid inhaling excessive dust while cutting and sawing by cleaning up dust with a vacuum system containing a HEPA air filter, damp sweeping or just dampen the area with water to avoid the dust becoming airborne. Always wear a protective respirator mask when handling silica dust.
- Be sure that waste is sealed in vapor tight containers for proper disposal. Always exercise care that silica dust and sludge do not ever enter the waterways. In the event that a large amount does enter waterways, contact Environmental Protection Authority or local Waste Management Authority immediately

Material Handling- Each business that handles American Quartz slabs will need a forklift to off-load A-frames from delivery trucks, move A-frames of slabs inside and outside of stock, and to load A-frames for shipping to fabricators or installers. Most companies will equip forklifts with a slab boom and lifter (clamp) for transferring individual slabs.

Moving slabs on A-frames- A-frames are meant to be moved only while slabs are secured to the A-frame. secure the slabs to the A-frame with banding or ratcheting tie down straps placed around the whole A-frame. The reason is to replicate the original banding as it comes from the factory.

- ***Transferring an A-frame using clamps to secure the cross members is an unsafe practice because the A-frame isn't always specified for this use.***
- When adjusting the slabs, check to ensure the A-frame is flat, resting on level ground, and is not leaning in anyway. The worker must be aware of the fall shadow in which the slab could potentially fall and stand in an upright position to the side of the A-frame when removing the banding from the A-frame.
- When removing slabs from the A-frame, placing a mechanical stop device (e.g., rigid safety pole similar to pole used for index racks) is suggested as a preventative measure to prevent a slab from falling in the direction of the worker. safety poles should be positioned before any banding is cut.
- Dragging A-frames across a floor can result damage and is dangerous practice. The only exception would be when the A-frame is equipped with runners attached to the A-frame to allow loading and unloading of box trailers. For A-frames which have been unloaded from box trailers, ensure the runner is undamaged at the time of unloading.

Slab Storage- Cost-effective ways to store American Quartz Slabs are on an A-frame (temporary storage), or in vertical racks (long term storage). A-frames used for storage are generally constructed of wood, while vertical storage racks are generally constructed of steel. Steel posts are often covered at the point of contact with carpet, rubber pads or wood to prevent scratching, gouging, or scoring of a slab. Vertical storage racks should be capacity rated and designed for stone slab storage.

- Without banding or strapping the slabs to the A-frame, slabs should not be stored on A-frames. Never try to move an A-frame that isn't banded. The A-frame needs to be shielded from the elements and any impact that could cause a slab or the complete A-frame to topple. To increase the stability of the A-frame, the number of slabs on either side should be balanced.
- ***Frames are designed for slab delivery and temporary storage. A-frames are not designed for long-term storage of slabs.***
- If slabs are to be stored on A-frames for an extended period, the A-frame should be periodically inspected to ensure integrity. A-frames should not be stored outside or in a wet environment for an extended period because they are not made of treated wood.
- Protect American Quartz slabs from prolonged exposure to direct sunlight as fully or partially exposed slabs can experience color fading. In northern climates where rain, ice and snow fall during the winter months, ice can build up under the wood braces of the A-frame. The combination of accumulated ice and the metal forks on the forklift require special handling. Make sure to remove any ice that may build up. The forklift should be outfitted with rubber sheaths to prevent the A-frames from slipping during transport. In addition, individual slabs which are icy or wet should be warmed and dried prior to hoisting to avoid slippage while transporting.

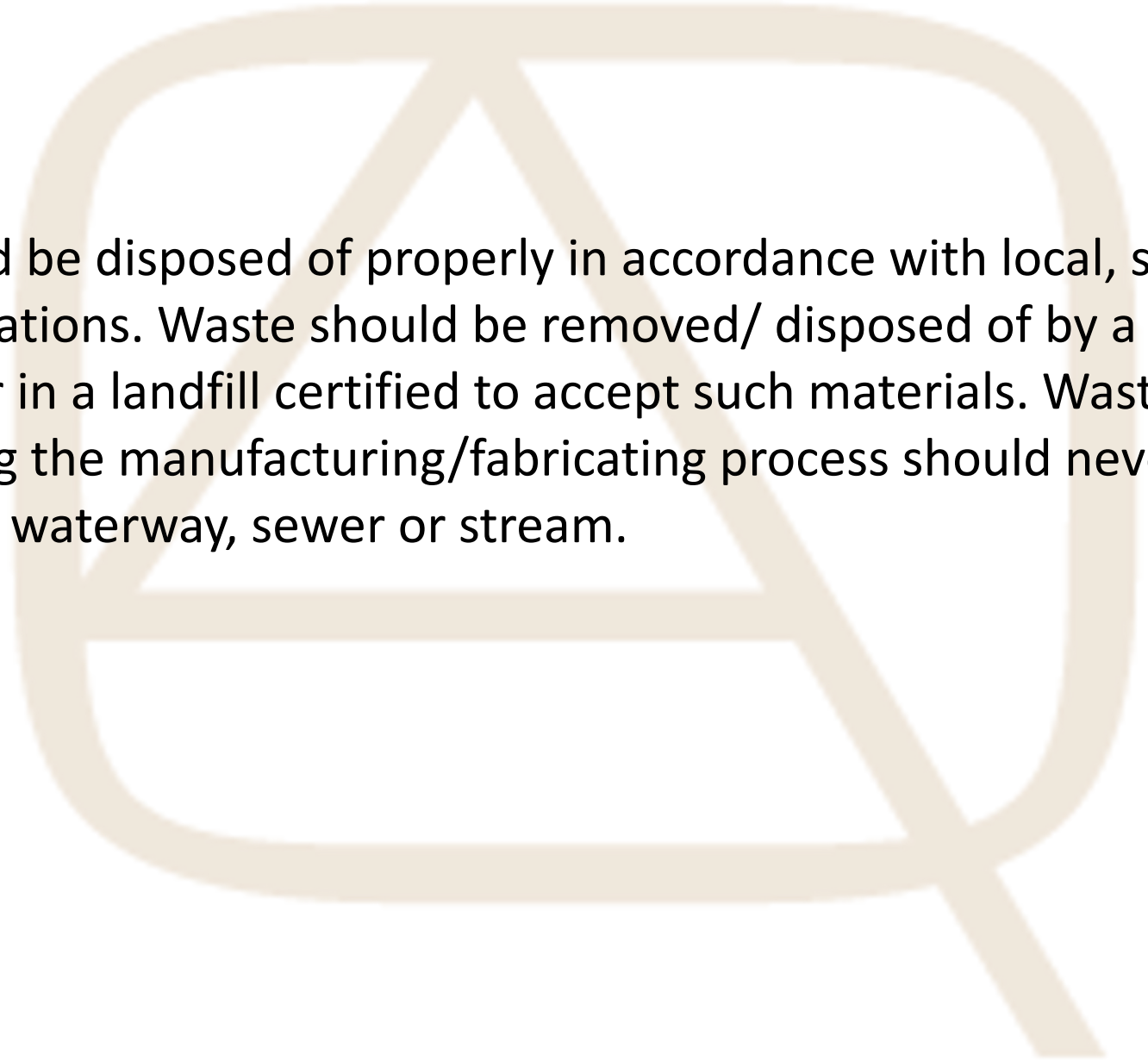


- **EXPOSURE GUIDELINES**- Maintain silica dust exposure at the lowest possible level, ideally below exposure standards:
- **ENGINEERING CONTROL**- Always cut and fabricate the slab in well-ventilated areas with the ambient atmosphere below the exposure limit(s) outlined in the SDS. Use sharp tools and wet abrasives to reduce airborne dust.
- **RESPIRATORY PROTECTION**- Exposure to crystalline silica dust can be limited by using a carefully selected, worn, and used respirator. Follow all safety procedures required by U.S. Federal OSHA Standard (29 CFR 1910.134) or the Canadian CSA Z94.4-93 and applicable standards of Canadian Provinces.
- **EYE/FACE PROTECTION**- Safety glasses with side shields or goggles should be worn during cutting, grinding, or polishing operations.
- **SKIN PROTECTION**- Use appropriate body protection for cutting, grinding, and polishing operations, such as work gloves when handling sharp or rough edges and steel toe shoes when lifting products.
- **HYGIENE PROTECTION**- Wash your hands before eating and drinking, and always wash contaminated clothing before reusing.

Occupation Safety and Health Administration (www.osha.org) - OSHA's allowable exposure limit (PEL) for respirable crystalline silica (quartz) is 50 $\mu\text{g}/\text{m}^3$ as an eight-hour weighted average (TWA)

The national Institute of Occupational Safety and Health (NIOSH) (www.cdc.gov/niosh/) - Suggested exposure limit for respirable crystalline silica is 50 $\mu\text{g}/\text{m}^3$ of air as a TQA for up to a 10-hour work day of a 40-hour workweek





Waste should be disposed of properly in accordance with local, state and federal regulations. Waste should be removed/ disposed of by a licensed contractor or in a landfill certified to accept such materials. Waste collected on site during the manufacturing/fabricating process should never be allowed to enter ANY waterway, sewer or stream.



Moving Slabs and/or Work-in-Process within the Fabrication Shop- There are several effective products for moving material through a shop. Please consult the appropriate vendor for the right equipment for your shop. Verify that the equipment has a suitable capacity rating for the intended use. The following is not an exclusive list:

- Forklift equipped with a boom and slab lifter (clamp)
- Overhead crane equipped with a vacuum lift or slab lifter (clamp)
- Jib crane equipped with a vacuum lift or slab lifter (clamp)
- Carts/tables/dollies:
 - -Slab cart/buggy (hydraulic and battery-operated versions are available)
 - -Tilting hydraulic transport tables
 - -Workshop cart with wheels
 - -Fabrication carts (A-frame mode that pivots to horizontal mode is available)
 - -Hand trucks (multi-position versions available)
 - -Slab dolly
- Conveyors





Transporting Finished Material to the jobsite- Follow the general safety guidelines on the preceding pages. Moving finished material from the fabrication factory to the project necessitates precise planning. The finished product must be handled carefully to prevent damage during transportation. Use caution if manual lifting is required. Always wear the appropriate personal protective equipment. Lift the material using proper lifting procedures at all times. Clamps and/or tie down straps should be used to secure the material to an A-frame or other similar inside device. To protect the material, place separate pieces back-to-back and face-to-face. Avoid overloading the transport equipment. Secure the device and the material to prevent any moving during transit.

- Walk the planned entry route upon arrival and before unloading the cargo to analyze and decide where access limits may represent a problem with material delivery. Clear any obstacles from the planned path. When transferring material from the vehicle to the ground, exercise considerable caution. If possible, use transport carts rather than carrying things by hand. Always use proper lifting techniques and wear appropriate personal protective equipment when lifting material.

