

AGNORA GLASS

SAFETY GUIDE





ABOUT SAFETY

Awake's glass paneled windows and doors are large and extremely heavy objects, often weighing thousands of pounds. Due to their sheer size and weight, serious injuries including death and significant property damage are among the inherent risks associated with the loading, offloading, and storage processes. To mitigate such risks, it is critical that Dealer implement and ensure compliance with adequate safety training and practices, including, but not limited to, those outlined below.



PRODUCT LOADING

If products are picked up at Awake's facility by Dealer (referred to as "Will Call"), it is Dealer's responsibility to provide (1) an adequate number of trained workers physically capable of handling large and heavy glass fenestrations; and (2) appropriate safety equipment. All workers are required to follow all applicable safety regulations, including Occupational Safety and Health Administration ("OSHA") requirements, in addition to the following safety guidelines:

- At least three (3) experienced, trained, and physically capable workers are required to load units onto the delivery truck or trailer. For larger orders (exceeding 50 units) additional workers are required
- Workers shall ensure the area surrounding the delivery dock, truck, and inside the trailer are clear of any debris, obstructions, or other trip hazards
- Workers shall use safe lifting and handling techniques, including, but not limited to:
 - Using ergonomic bending and lifting techniques;
 - Refraining from exceeding personal limitations;
 - Avoiding unnecessary physical stress and strain;
 - Following all manufacturer safety instructions, warnings, and guidelines, when using or operating equipment, machinery and while placing or removing units from storage racks;
 - Heeding fire safety precautions; and
 - Using proper personal protective equipment ("PPE"), including:
 - Clean protective gloves and other forearm protection;
 - eye and ear protection;
 - steel-toed safety boots or shoes; and
 - weight-lifting belts.

- Workers shall also utilize safe loading procedures, including
 - Loading one unit at a time;
 - Ensuring each unit is properly restrained by using ties, straps, and clamps and are stacked with an appropriately angled lean to improve stability during transport and off loading; and
 - If products are stacked inside the delivery truck:
- Ensuring heavier units are not stacked on top of lighter units; and
- Ensuring at least one (1) physically capable worker supports the stacked units to make sure they stay in a stable arrangement while at least two (2) additional physically capable workers add additional units to the stack.



Awake representatives will contact Dealer to schedule the delivery date and location. It is the Dealer's responsibility to ensure:

1. Adequate access to the delivery site by delivery vehicles, including:

- sufficient driveway access and parking space to ensure the vehicle will not need to block traffic or extend out into the road (at least 12 ft. wide, 13 ½ ft. high, and 75 ft. long is needed);
- necessary codes for gated communities;
- alternative routes (in the event the main route includes private or governmental restrictions prohibiting access by delivery vehicles); and
- A cleared space, free of construction debris and other obstructions, around the delivery truck to safely accept the delivery.

2. Adequate workers to accept delivery:

- no less than two (2) physically able and trained professionals available at the agreed upon delivery

Date/time for every fifty (50) units delivered; and

- proper equipment to safely offload, store, and install product as described below. Delivery truck drivers are not permitted to assist in product off-loading, nor will they rearrange or resecure products during the offloading process.

If Dealer fails to provide an adequate delivery site, workers, or equipment, Awake may refuse to make delivery and shall not be responsible for any damages or inconvenience caused by any resulting delays.



Product Offloading & Transporting

It is Dealer's responsibility to create and implement safety protocols and procedures that are compliant with all applicable safety regulations, including, but not limited to, Occupational Safety and Health Administration ("OSHA"). In addition, safety protocols for offloading, unloading, and transporting Awake's products should include:

1. Training programs to reduce the risk of personal injuries, including training on:
 - proper lifting, bending, and other ergonomically sound practices;
 - how to identify and remedy potential hazards in the environment or delivery site;
 - work site communication and clear delineation of responsibilities;
 - fire safety;
 - monitoring and supervision to ensure training is implemented at the delivery site; and
 - regular safety meetings to identify observed risks and assess any work site injuries to update or adjust safety procedures accordingly.

2. Proper use of personal protective equipment ("PPE"), including:
 - Clean protective gloves and other forearm protection;
 - Safety goggles and ear protection;
 - steel-toed safety boots or shoes; and
 - weight-lifting belts.

3. Proper use of machinery, equipment, tools, and storage racks, including:
 - following all manufacturers' operation and safety instructions for use of all equipment, materials, and machinery;
 - using wheel brakes and other vehicle restraint devices;
 - using glass manipulators, cups or clamps to improve handling and grip when lifting glass;
 - using hand trucks, dollies and/or pallet jacks or carts;
 - using cranes, when possible, to lift crates from above;
 - if use of forklifts is needed, using only forklifts with a protective cage and appropriate weight capacity and taking all precautions to reduce the risk of tipping as described below;
 - using properly weighted straps or bands to resecure remaining crates or units as each unit is offloaded;
 - ensuring workers on foot are not in the delivery truck while a crane or forklift is in use; and
 - ensuring vehicles, machinery and equipment are maintained in a safe operating condition.

4. Proper procedures for assessing potential hazards before the offloading operation begins, including:

- ensuring the delivery truck is stable and not moving before offloading commences;
- ensuring individual crates and multiple crates strapped together are still leaning at appropriate angles and are secured by straps or bands to prevent them from tipping or falling over when offloading commences and individual units are removed; and
- taking proper additional caution when handling Oversized Loads (see Section 9 below).

5. Proper offloading procedures, including:

- ensuring no one stands under or near unsecured crates (a radius equal to the height of the unit (the "Zone of Danger" should remain clear at all times);
- whenever possible, removing crates from the delivery truck from the top utilizing a crane and appropriately weighted straps or cables attached around the side blocks on each side of the crate, as described further in Section 9 below;
- ensuring individual crates are removed one at a time, with the crate on the top of the stack removed first; resecuring all units remaining in the stack by ties, straps and clamps to ensure that they remain in a stable arrangement and prevent them from falling over as units are removed;
- ensuring no untrained personnel enter the delivery truck and are clear of the path of travel and Zone of Danger; and
- ensuring no personnel remain on the delivery truck or near the wheels when it is being moved.

6. Proper procedures for transporting products, including:

- ensuring crates are transported from the top (utilizing a crane) when at all possible, as lifting the crate from the bottom with a forklift significant increases the risk of tipping, which can result in property damage and severe personal injuries;
- if a forklift must be used, ensuring all precautions are taken to reduce the risk of tipping as, as described in Section 9 below;
- ensuring adequate assessment of delivery route to ensure sufficient clearance to move products around walls, racks, equipment, and other obstructions without damaging the product or other property;
- ensuring adequate assessment of unloading surfaces to ensure they are level and capable of securely withstanding the weight of the load;
- using hydraulic ramps as appropriate; and
- ensuring no workers are downhill or within the Zone of Danger of a moving load.

7. Proper procedures for cleaning and handling broken glass, including:

- Proper PPE is worn to avoid cut injuries, including cut-resistant gloves and cut-resistant sleeves; and
- Proper PPE is worn to avoid respiratory injuries, including use of N95 masks.

8. Proper procedures for ensuring safety protocols are followed on site.

9. Additional safety procedures are practiced when handling oversized glass or crates (exceeding 1500 lbs) (collectively, "Oversized Loads"), including:

- ensuring all PPE, described in Section 2, is used at all times;
- ensuring safe offloading procedures, including:
- removing any stability braces from the crate you are moving only (leaving the braces around any crates remaining on the delivery truck);
- ensuring braces are removed one at a time from the top (by utilizing a ladder);
- ensuring the remaining crates are secured with properly weighted straps or bands; and
- once the brace is removed, ensuring each crate is lifted off the delivery truck from the top utilizing a crane and appropriately weighted straps or cables attached around the side blocks on each side of the crate as pictured below:



- ensuring safe transport procedures, including:

- using at least two spotters at all times during transport;
- transporting the crate from the top (utilizing a crane), when at all possible, as lifting crates from the bottom with a forklift significantly increases the risk of tipping, which can result in property damage and severe personal injuries; and
- if a forklift must be used to lift from below, ensuring all precautions are taken to reduce the risk of tipping, including:
 - only using forklifts with a protective cage and appropriate weight capacity;
 - ensuring all forklift manufacturers' operation and safety instructions, recommendations, and warnings are followed;
 - ensuring the forklift is only operated by properly trained and experienced professionals;
 - ensuring crates are only moved in the upright position;
 - ensuring the crate is secured by utilizing appropriately weighted straps and bands secured to the forklift mast guard;
 - ensuring the load remains as close to the ground as possible;
 - ensuring the crate is stable before commencing transport and utilizing a spreader bar if needed to balance the load (as crates may not be balanced/weight centered);
 - never attempting to manually stabilize a crate with hands, arms or legs due to risk of severe crushing injuries;
 - ensuring a radius equal to the height of the crate (the "Zone of Danger") is clear from all personnel and obstructions all times during transport; and
 - ensuring the two spotters walk with the forklift and continuously inspect the path of travel and ensure there are no personnel, obstacles, debris, or other slipping hazards in the selected path. However, spotters must keep a safe distance from the crate and should never enter, stand or walk near the Zone of Danger during transport or offloading.
- ensuring safe placement procedures to minimize the risk of tipping, including:
 - ensuring the crates are placed on stable ground in an area not susceptible to high winds and where the Zone of Danger around the crate is and will remain free from personnel, debris or other obstructions or hazards;
 - ensuring nothing is leaned against a crate;

- ensuring safe practices when removing glass from the crate, including:
 - ensuring the crate is placed in the upright position with a slight angle at the correct lean (no less than and as close to 6 degrees as possible) before opening as an improper lean can result in glass falling out, causing breakage and/or severe personal injury;
 - ensuring crates are only opened from the front, typically denoted by a clear envelope containing the crate documents;
 - ensuring a glass manipulator of appropriate load capacity are utilized to remove each glass pane;
 - ensuring the glass manipulator is in place to properly support the glass before removing each bandstrap (as glass may fall once strap the band is removed);
 - ensuring any remaining glass is secured in the crate with bands or straps until it is ready for removal; and
- ensuring all operation and safety instructions, recommendations, and warnings provided by the glass manipulator manufacturer are followed.
- ensuring safe installation practices (including all instructions and recommendations in Awake's Installation Instructions).

Figure 4



Product Storage

Awake's products should be installed as soon as practicable to minimize the risk of damage during storage. However, if products must be stored, the following procedures are recommended:

1. Only store products in a dry location that is not exposed to climatic conditions, including precipitation, flooding, extreme heat, humidity, pests or rodents.
2. Ensure that the storage location is free from debris or hazardous materials that could cause fires or explosions.
3. Ensure the weight, size and shape of the units stored on racks and frames does not exceed the manufacturers' recommended weight capacities.
4. Ensure all product units are securely stacked at appropriate angles and strapped or banded to prevent units from tipping or falling.
5. Ensure products are thoroughly cleaned as dirt or debris that accumulates during storage can damage product finishes. See Awake's Care & Maintenance Guide, available at www.awakewdc.com, for more details.