

**STRUCTURAL SHOP
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Ref. Code: S-C-13**

INSTALLING AND REPAIRING WINDOWS		
Activity	Hazard Identification	Required Precautions
1. Driving to and from work site.	1. Motor vehicle accident; striking pedestrians, bicyclists, or individuals using rollerblades.	1. Wear prescription lenses, if required, and seatbelt. Verify that all equipment on vehicle is secured properly. Stay alert for pedestrians, bicyclists, and individuals using rollerblades.
2. Using stepladder.	2. Ladder collapsing; slipping/falling from ladder.	2. Inspect ladder before use. Use ladder of proper height. Make sure ladder is properly assembled and locked and standing on level ground. Do not exceed weight limit for ladder. Do not stand on top of ladder or on top rung. Have coworker hold ladder.
3. Using extension ladder.	3. Ladder falling; slipping/falling from ladder.	3. If possible, use hi-ranger or genie boom instead. Inspect ladder before use. Verify that ladder is properly assembled and that it is securely positioned on level ground. Tie safety rope to ladder to secure it to building. Use 1'4' rule. Use OSHA decal to verify that ladder is in the proper position.
4. Using scaffolding.	4. Scaffolding collapsing; slipping/falling from scaffolding.	4. If possible, use hi-ranger or genie boom instead. Verify that scaffolding is properly assembled and level and that railing is up. Secure scaffolding to building if possible. Verify a safe means of climbing on/off scaffolding.

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5. Using hi-ranger or genie boom.	5a. Falling out of bucket.	5a. Verify boom operator is certified. Use outriggers to level truck. Wear safety belt and lifeline. Do not exceed weight limit of 500 lbs. in bucket. If moving genie boom more than a few feet at a time, lower bucket before proceeding. Do not drive genie boom over curbs, manhole covers, or anything other than level, hard ground. Do not lean out over railing.
	5b. Electric shock; electrocution.	5b. Stay clear of power lines and of lights on sides of building. Have someone stay on the ground to watch for hazards.
	5c. Running into obstacles such as trees, power lines, etc.	5c. Have grounds crew remove any tree branches that present hazards. Have someone stay on the ground to watch for hazards.
6. Lifting/carrying glass.	6a. Back strain; overexertion.	6a. Know your weight-lifting capacity and get help if needed. Lift using leg muscles. Keep back straight. Always have two or more people lift large pieces of glass.
	6b. Losing control of glass and dropping it.	6b. Use suction cups to carry glass.
	6c. Slipping on ice/snow.	6c. Put job off to better day if possible. Find safest route for walking. Use more people to carry glass.
7. Working on a windy day.	7. Losing control of glass and dropping it.	7. Have two or more people holding glass, depending on size of glass.
8. Removing broken glass from window.	8a. Severe cuts and lacerations.	8a. Wear insulated leather gloves, wrist and elbow protectors, and safety glasses. Do not put hands on broken glass. Do not put hands under broken pane of glass as it could slide down unexpectedly. If a piece of glass is starting to fall, do not attempt to catch it—let it fall.

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	8b. Inhalation of fine glass particles; cuts from fine particles of glass.	8b. Wear safety glasses, dust mask, and gloves.
	8c. Stepping on glass.	8c. Wear safety shoes.
9. Changing balancer.	9. Window falling on worker.	9. Have two people working together to make sure that window is propped or held up.
10. Cutting glass out of window or cutting new glass for installation.	10a. Severe cuts/lacerations.	10a. Wear insulated leather gloves and laminated safety glasses.
	10b. Inhalation of fine particles of glass.	10b. Wear dust mask.
	10c. Hands getting chopped off.	10c. Never put hands under broken pane of glass as it could slide down unexpectedly and slice you.
11. Working in area of vehicular traffic.	11. Vehicles striking and/or knocking over ladder, scaffolding, or bucket truck. Vehicle striking worker.	11. Close off driveways and roadways using cones and tape before beginning work. Contact public safety for assistance if necessary.
12. Working in area of pedestrian traffic.	12. Pedestrian knocking over ladder; dropping tools or glass on pedestrians; other injuries to pedestrians.	12. Secure area with cones and tape before beginning work. Have public safety present to keep pedestrians away from work area.
13. Using hand tools.	13. Cuts, pinches, smashes, punctures, severing of fingers.	13. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
14. Disposing of glass.	14. Cuts/injuries to others from contact with broken glass.	14. Always dispose of glass properly in dumpster so that no one gets cut accidentally.