OSHA standards applicable to Builders Risk

Foundations ,walls, columns, beams, trusses are not structurally sound until properly tied in/supported

OSHA Reference:

1926 Subpart M – Fall Protection 1926.501(a)(2)
1926 Subpart Q - Concrete and Masonry Construction
1926 Subpart R – Steel Erection

Damage to structure, materials and equipment from loads not properly secured, overloaded/improperly set-up cranes, improper rigging techniques.

OSHA Reference:

1926 Subpart CC – Cranes (includes requirements for riggers)
1926 Subpart H – Material handling (rigging equipment)

Overloading scaffolds and causing damage to building structure

OSHA Reference:

1926 Subpart L - Scaffolding

Damage to building/structure due to use of telehandlers, pile driving and heavy equipment

OSHA Reference:

1926 Subpart O - Motor Vehicles, Mechanized Equipment, and Marine Operations

Damage due to fire, temporary heating, electrical installations, flammable storage, Welding operations

OSHA Reference:

1926 Subpart F – Fire Protection and Prevention

1926 Subpart K – Electrical

1926 Subpart J – Welding

Structural failure due to collapse excavations and trenches

OSHA Reference:

1926 Subpart P – Excavations

Overall Responsibility of Contractor to train workers, perform inspections and maintain jobsite conditions

1926.20(b) – Accident prevention programs, inspections

1926.20(f) & 1926.21 – Employee Training

1926.24 – Fire Prevention

1926.25 – Housekeeping

Exposures Common to all types of work activities	
Exposure	**Control**
• Demolition/rehabilitation of existing structures.	• Engineering survey to identify structural walls, columns to prevent collapse. • Engineering survey to identify charged fire protection systems, shut off value location • Engineering survey to identify process piping, electrical system • Hygiene survey for contaminated soil/structures • Fire protection in place and workers trained • Hot Work Permits in use
• Hot Work (Welding/Cutting/Brazing)	• Use of Hot Work Permits • Control of combustible materials in work areas(housekeeping) • Control of Flammable materials in work areas (proper storage and clean-up) • Control of sparks/slag dropping to lower levels • Use of fire blanketing • Floor holes covered • Fire Extinguishers located near hot work • Use of fire watch when necessary • After hours walk through by supervision to look for fire/smoke • Workers trained
• Material Handling of construction materials (steel, concrete, wood structures) that have long lead time to reproduce or can damage other structures	• Proper set-up/planning for crane use (site conditions) • Crane operator certification based on type of crane in use • Operator training for other heavy equipment • Trained and Qualified Riggers and Signalpersons • Oversight and planning for critical lifts • Rigging equipment inspected daily
• Environmental Conditions-Rain, snow causing damage to existing structure,	• Protection of open areas susceptible to water intrusion (rain, snow) reinforced for long term

installed/existing/store equipment/material or causing delayed dry in of building areas. • Damage and Delay due to theft/vandalism of equipment, copper, structure	protection • Pre-project planning of security based on project location (high crime/remote areas) • Evaluate location for security requirements (fencing, intrusion detection, lighting) • Contact local law enforcement of project location, work hours • Third party security company used • Delivery of materials coordinated with installation • Stored high value materials located in secure areas and kept to minimum • Good relationship with neighboring businesses • Security/Lighting sufficient for project based on location/value of installed materials
• Fire	• Fire extinguishers provided and easily accessible • Fire water standpipe follows construction sequence • Workers Trained on fire prevention methods (storage, electrical overloading, housekeeping, smoking policy) and use of fire extinguishers • Debris removed and placed in proper trash bins located away from project • Fire suppression system conspicuously marked. • Established fueling areas identified – away from structures • Flammable fueling properly bonded/grounded • Tar kettles properly maintained during hot roofing application • Torch down roofing applications controlled • Equipment Inspection and maintenance program established • Temporary heat sources necessary for freezing temps (fire protection, proper installation for temp heat) • Temporary electrical system installed by Qualified Electrician, inspected and maintained • Established flammable/combustible

• Water Damage • Identification/protection of underground and overhead utilities	storage areas • Coordination with project work for road impairment permitting for road closures due to work location • Quality Assurance program for inspection of plumbing/pipe connections • Water lines located behind walls prior to cutting/drilling • Water shut off valves identified and marked (if system remains charged) • Toe boards used near shafts/openings to minimize water on lower levels • Start-up process in place prior to pressurizing lines- pressurized lines marked/tagged • End of shift walk thru of project to ensure no leaks or running water present • Lockout/tagout of water valve on unfinished pressurized systems (off work hours) keys provided to security in event of emergency • Phone the one-call system to identify underground utilities. • Use as-build drawings to identify potential underground utilities on industrial property/contact plant engineering to determine additional underground utilities • Contact power company in advance to de-energize, move overhead lines or install protective sleeves/covers • Coordinate with plant engineering to de-energize, move, blanket overhead utilities
Foundations	
• Contaminated Soil (project delay) • Underground and overhead utilities • Collapse of nearby structures • Underground utilities damage causing plant systems disruption (Electrical, gas)	• Proper soil analysis and protection from cave-in near existing structures (shorting or underpinning) • Coordinate with facility engineering to determine locationn of underground utilities • Protective barriers/stop logs/spotters when equipment is working near excavations • Proper soil analysis and slope for excavations • Site assessment, investigate prior site use evaluate site location (marsh or wet areas etc.)
Concrete/masonry walls	
• Manual material handling equipment	• Inspection of all concrete shoring and

• Material handling equipment • Concrete handling system hazards (rigging failure on overhead loads, hose coupling failure, boom truck hitting overhead power lines, pinch points on conveyor systems) • Scaffolds with weather protection in winter blowing down • Walls blowing down • Extremely heavy/unbalanced loads on scaffolds due to mud trays and block. • Overturning of telehandlers	forming systems prior to use and on a daily basis by a competent person • Use weather reports to indicate wind loads and increase supports for green walls • Brace walls for overnight expectations • Engineered scaffold tie-ins when using weather protection (poly) • Planned material handling to limit overloading scaffolds with mud and block • Train telehandler operators on hazards of soft ground and operating with forks extended • Proper procedures when parking equipment (brakes set/wheels chocked)
Steel/wood/concrete structures	
• Beams/Trusses damaged during lifting operations • Unsecured beams/trusses/joists that are susceptible to wind	• Crane set-up/use • Rigging Inspected and rated for load • Trained/qualified workers for task • Proper temporary bracing of structural components directed by Competent Person
Damage to Mechanical/Electrical Equipment	
• Damage during transport/delivery • Damage while on site • Damage during installation • Damage during start-up testing	• Reputable transport company • On-site storage time kept to minimum • Storage location protected from hail/rain/snow • Rigging plan in place • Proper rigging selected to prevent overload and damage to paint/housing • Evaluation of start-up testing safeguards, personnel and methods
Employee Training	• New hire include training on fire prevention, inspection, storage, security requirements • Competent Person provided training specific to operations they supervise • Worker training on equipment use, inspection, operation based on manufacturers instructions
This list is not designed nor does it not contain every situation, process or exposure that could result in a Builders Risk Claim	

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