

# HANGING HEAVY OBJECTS

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**A process  
for assessing  
overhead  
suspension  
applications.**

Professional contractors often have to be concerned with designing and installing rigging systems that hang heavy objects above people's heads. Based on my organization's successful experience with rigging and risk management in designing and delivering more than 18,000 rigging systems, we have developed a simple process. Outlined here is the tool we use when confronted with overhead suspension applications.

## **Mission**

What must be accomplished at the end of an installation? The answer generates much more understanding about the scope of work and relative design challenges within a project. Perhaps the scope of work only includes hardware for the load being suspended but the building structure is omitted. If this is the case, communication with the customer regarding the needs of the building structure is essential—and be sure to get commitments in writing, confirming that the structure will accommodate the defined needs.

If connection to the structure is a part of the scope, then it should be understood that the budget will include a professional engineer, qualified to assess the building structure and to assure that the installation will not damage the building or fall down.

Perhaps the suspended object must be rigged in such a way that it will blend in with the surroundings aesthetically, while maintaining optimum performance characteristics. A system such as this will require numerous hours of design and redesign,

## **RIGGING SYSTEM DESIGN CHECKLIST**

✓	Type of structure
✓	Condition of structure
✓	Access to structure
✓	Options for attachment to structure
✓	Engineering of structural attachment
✓	Other concerns about structure
✓	Distance from structure attachment to the load
✓	Isolator, sway brace or grommet needs
✓	Ability to inspect the suspension system
✓	Visual impact of the suspension system
✓	Obstructions to the suspension system
✓	Other concerns about the suspension system
✓	Method of connection to the load
✓	Special needs to install the load
✓	Positioning and handling of the load
✓	Obstructions to the load
✓	Visual impact of the load
✓	Other concerns about the load
✓	Rigging system for the load
✓	Adjustment needs internal of the load
✓	Other factors affecting installation
✓	Compliance with standards
✓	Product traceability, risk management
✓	Reputable brand names and vendors
✓	Training and/or qualified installers
✓	Cash flow responsibilities and factors
✓	Scheduling responsibilities and factors
✓	Other factors affecting the business transaction
✓	Other factors affecting safety
✓	Other factors affecting performance

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