Swing Stages Used for Wind Turbine Blade or Tower Maintenance

Due to the design of wind turbines, it is necessary to provide external access in order to perform maintenance on blades and towers. The most effective method of access is suspended scaffolds, also known as swing stages. The following material will provide users and designers with information that must be considered when swing stages are used to access wind turbine blades and towers.

- The SSFI Code of Safe Practices for Suspended Scaffolds provides a good, general overview of safety items related to suspended scaffolds. Review this code before installing or working on suspended scaffolds.

- The ANSI/ASSE A10.8 standard is a valuable resource for information about suspended and other scaffolds.

- Fall protection and personal fall arrest systems are mandatory. See the OSHA regulations in CFR 1926.451 and CFR 1926.502 for requirements in this regard.

- Obviously, wind turbines are placed in areas that provide enough wind to produce power. In lieu of a specific site work rule, the competent person on site is the individual best able to assess site conditions and to determine site-specific conditions for halting work from swing stages due to high winds. If a hazard assessment specific to the physical location and to the work performed is not available, the Scaffolding Shoring & Forming Institute recommends a competent person should consider stopping work if wind exceeds 25 mph (40 kmh) for two point systems and 20 mph (32 kmh) for single point systems.

- Do not modify equipment or components. Use equipment as originally designed.

- Do not overload a suspended scaffold. See SSFI Technical Bulletin Overloading Suspended Scaffold Hoists for additional information.

- Use equipment that has been designed and tested to SSFI and other industry standards. Ensure hoists are tested and rated according to the ANSI/UL 1323 standard. Platforms must comply with the ANSI/UL 1322 standard.

- Ensure equipment has been serviced and inspected properly according to manufacturer’s instructions.

- For information about typical issues related to swing stage power, see the SSFI Technical Bulletin Power for Suspended Scaffolds.
- Understand rigging practices and the use of taglines will expose platforms to loading that is not typical for building applications; therefore, additional inspections and inspections at more frequent intervals may be needed.

Familiarity with the resources listed above and with the manufacturer’s instructions is the first step in proper use of swing stages as methods of accessing wind turbine blades and towers.