

## **1.0 GENERAL**

### **1.1 WORK SEQUENCE**

- .1 Load testing of all new and retrofitted fall protection anchorages as shown on the Drawings or as directed by the Departmental Representative.

### **1.2 REFERENCE STANDARDS**

- .1 Reference Standards are latest editions, unless noted otherwise.
- .2 Canadian Standards Association (CSA)
  - .1 CSA Fall Arrest Systems – Practical Essentials
  - .2 CSA Z259.13: Flexible Horizontal Lifeline Systems
  - .3 CSA Z259.16: Design of Active Fall Protection Systems
  - .4 CAN/CSA Z271: Safety Code for Suspended Elevating Platforms
  - .5 CAN/CSA Z91: Health and Safety Code for Suspended Equipment Operations

### **1.3 REGULATORY REQUIREMENTS**

- .1 Conform to the Occupational Health and Safety Act and regulations that apply to the work being performed.
- .2 Conform to the National Building Code and requirements of CAN/CSA Z91 (Safety Code for Suspended Equipment Operations), CAN/CSA Z271 (Safety Code for Suspended Elevating Platforms), & CAN/CSA Z259.16 (Design of Active Fall-Protection Systems).

### **1.4 DESIGN AND COORDINATION**

- .1 Conduct visual review of specified fall protection systems.
- .2 Conduct load testing in accordance with regulatory requirements and safe work practices and as directed by the Departmental Representative.

## **1.5 SUBMITTALS**

- .1 Submit test reports to Departmental Representative. Test reports are to include but not be limited to the following:
  - .1 Show anchor layout and location of tests.
  - .2 Configuration of the testing apparatus.
  - .3 Certificate of Calibration for testing apparatus dated within 6 months of the date of testing.
  - .4 Observations from visual review.
  - .5 Results from load testing including: anchors tested, final load, observations of movement and/or deformation.

## **2.0 PRODUCTS**

### **2.1 EQUIPMENT**

- .1 Ensure all load testing equipment, including connecting components, is capable of resisting the ultimate load with a factor of safety of 5.
- .2 Calibrate load testing equipment prior to anchor testing.
- .3 Submit calibration certificates upon request by Departmental Representative.

## **3.0 EXECUTION**

### **3.1 EXAMINATION**

- .1 Report to the Departmental Representative in writing, defects of work prepared by other trades and other unsatisfactory site conditions.

### **3.2 PREPARATION**

- .1 Protect building interior and contents against ingress of water, dust, debris or other material.
- .2 Contractor to provide adequate hoarding and protection of testing apparatus and adjacent surroundings in the event of catastrophic failure of the anchor assembly as a result of load testing.

### **3.3 TESTING**

- .1 Notify Departmental Representative at least 48 hours prior to start of testing. Departmental Representative must be present during testing.

- .2 When practicable, test loading to be in direction(s) that generates the most critical effect on the anchorage system, unless otherwise directed by the Departmental Representative. Conduct anchor load testing with test loads as follows:
  - .1 Initial Load – 7.1 kN maintain for a minimum of 30 seconds.
  - .2 Final load – 11.1 kN maintain for a minimum of 30 seconds.
- .3 Make notes on movement during load testing and permanent deformation, if any.
- .4 Conduct visual review on fall protection components, documenting deterioration, including but not limited to: corrosion, damage, deployment of energy absorbers, and tampering of components.
- .5 Components of the fall protection system may be tagged for removal from service, at the discretion of the Departmental Representative.

**END OF SECTION**