

# CHAPTER 1 SPECIAL INSPECTIONS PROGRAM

## SICC-101 INTRODUCTION

**SICC-101.1 Special inspections required.** Effect March 1<sup>st</sup> 2007, the North Carolina Building Code Council revised section 1704.1 of the NC State Building Code. The revision implements a mandatory statewide program of special inspections. The Catawba County Special Inspections Program was established in response to this mandatory rule. The Special Inspections Program generally encompasses commercial buildings that are designated as essential facilities and buildings that represent a substantial hazard to human life in the event of failure. The Special Inspections Program is administered and monitored by the Catawba County Building Services Division.

**SICC-101.2 Content.** This document, *Special Inspections Program (SICC-2007)*, implements the requirements of 2006 NCSBC Chapter 17. The SICC includes excerpts of technical requirements of the NCSBC and reference standards, policies and procedures underpinning the Special Inspections Program in Catawba County, and descriptions of the roles and responsibilities of all parties involved in special inspections. The SICC also includes excerpts from the *“Guide to Special Inspections and Quality Assurance”* developed by the Council of American Structural Engineers. **This document is to be used in conjunction with the 2006 North Carolina State Building Code.**

**SICC-101.3 Special inspections and materials testing.** The Special Inspections Program is based on the engineering and industry standards adopted by the North Carolina Building Code Council as a part of the NCSBC. These standards are promulgated by nationally recognized organizations such as the American Iron and Steel Institute (AISI); the American Institute of Steel Construction (AISC); the Portland Cement Association (PCA); the National Concrete Masonry Association (NCMA); the American Concrete Institute (ACI); and the Brick Industry Association (BIA). The requirements for special inspections and materials testing contained in the NCSBC (2006) and these standards can be categorized as follows:

- Inspections and testing to substantiate adequacy of the fabrication process, e.g., quality of pre-manufactured steel beams.
- Inspections and testing to substantiate adequacy of construction materials and their installation, e.g., strength of cast-in-place concrete.
- Inspections and testing to substantiate adequacy of site construction techniques, e.g., protection of concrete during cold weather periods, quality of field welding of structural connections, etc.

The above standards do not specify who should perform special inspections. The NCSBC specifies that the owner is responsible to provide a firm independent of the contractor to provide required testing and inspections. Benefits to this method of inspection include:

- Scheduling flexibility and minimizes delays during the construction process. A contractor does not have to wait for County inspectors to proceed with each stage of the **special inspection process** (These inspections are in addition to the inspections specified in the 2006 North Carolina Administrative Code & Policies Section 107. See Appendix C).
- With the increased level of inspection services provided by a licensed professional, compliance with material specifications, quality control and workmanship and are improved.

- Owners retain the engineering firm they deem most qualified to respond to unforeseen circumstances, abide by the owner's construction schedule, and provide special inspection and testing services.

**SICC-101.4 Purpose.** The purpose of the SICC-2007 is to:

- Clearly define the responsibility of all parties.
- Standardize building code application and implementation.
- Apply the Special Inspections Program uniformly throughout Catawba County.

The SICC-2007 has chapters and procedural outlines identifying the purpose, team members' responsibilities, time requirements, and scope of various construction activities. The SICC-2007 applies throughout the life of the project, **and a copy of the SICC-2007 shall be available at the job site from the time of the Catawba County Building Services Division (CCBSD) preconstruction meeting through final inspections prior to occupancy.**

- At the preconstruction meeting, parties to the meeting shall sign an acknowledgment of the **Statement of Special Inspections (SSI)** which identifies the special inspections requirements for the project.
- The provisions of the SICC-2007 do not relieve any participant from the proper performance of work according to contracts, approved plans and specifications, compliance with the NCSBC building code requirements, and the applicable federal and state safety regulations.

## **SICC-102 THE SPECIAL INSPECTIONS ENGINEER OF RECORD**

**SICC-102.1 Special inspections services.** Under the Special Inspections Program, the **Owner** of a building (or the registered design professional in responsible charge acting as the owner's agent) shall retain an independent NC registered design professional (**RDP**) to be the **Special Inspections Engineer of Record (SIER)**. The **SIER** provides special inspection services as required herein, including oversight for the services of an **inspection and testing agency** which shall meet the requirements of ASTM E 329. Both the **SIER** and the **inspection and testing agency** shall be independent of the contractors performing the work requiring special inspections. The **SIER** and the **inspection and testing agency** are subject to County approval. The role of County staff is to confirm that the work of the **SIER** and the **inspection and testing agency** complies with the requirements of the Special Inspections Program.

The **SIER** (referred to as "special inspector" in the NCSBC) shall conduct special inspections in accordance with the requirements of the NCSBC. At the completion of the project, the **SIER** shall prepare a final report of special inspections for review and approval by the **SER, AR** and/or **GER**, as appropriate, which shall then be submitted to **Catawba County Building Services Division (CCBSD)** for review and approval, prior to final building inspection approval and issuance of a Certificate of Compliance.