Sonoco

1 North Second Street

Hartsville, South Carolina 29550

Toll Free (888) SON-TUBE (766-8823)

Website www.sonotube.com

E-mail terry.mckeon@sonoco.com

Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format. The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings.

Delete all "Specifier Notes" when editing this section.

SECTION 03105

ROUND CONCRETE COLUMN FORMS

Specifier Notes: This section covers Sonoco Sonotube® Concrete Forms. Consult Sonoco for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Round cast-in-place concrete column forms.

1.2 RELATED SECTIONS

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

A. Section 03300 - Cast-in-Place Concrete.

1.3 REFERENCES

Specifier Notes: List standards referenced in this section, complete with designations and titles. This article does not require compliance with standards, but is merely a listing of those used.

A. ACI 301 - Standard Specification for Structural Concrete.

1.4 SUBMITTALS

- A. Comply with Section 01330 Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including erection and removal instructions.

Specifier Notes: Edit the following sentence to specify shop drawings. Delete if shop drawings are not required for formwork.

C. Shop Drawings: Submit manufacturer's shop drawings, indicating locations and dimensions of embedded items.

1.5 QUALITY ASSURANCE

A. Column Formwork and Form Accessories: ACI 301, unless otherwise specified.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site with labels clearly identifying product name and manufacturer.
- B. Storage:
 - 1. Store forms in accordance with manufacturer's instructions.
 - 2. Store forms vertically in dry area if at all possible.
 - 3. If forms stored horizontally, elevate above ground on supports running length of forms. Uniform support is required to keep forms from warping.
 - 4. Protect forms from rain and excess moisture.
 - 5. Do not dent, scratch, or damage interior coating.
 - 6. Do not drop forms.
- C. Handling: Protect forms during handling and erection to prevent damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Sonoco, 1 North Second Street, Hartsville, South Carolina 29550. Toll Free (888) 875-8754. Website www.sonotube.com. E-mail terry.mckeon@sonoco.com.

2.2 ROUND CONCRETE COLUMN FORMS

- A. Concrete Column Forms: Sonotube Concrete Forms.
 - 1. Description: Multiple layers of 100 percent recycled paperboard, spirally wound, and laminated with adhesive.
 - 2. Interior Surface: Smooth with spiral seam. Moisture barrier plastic coating.
 - Exterior Surface:
 - a. Sonotube RainGuard 100 percent recycled paper,
 - b. Sonotube Commercial Moisture Barrier outer label.
 - 4. Forms will impart visible spiral mark on concrete columns.
 - 5. 1-piece, 1-time-use forms.
 - 6. Recyclable.

Specifier Notes: Specify inside diameter of forms. Sonotube Concrete Forms are available with inside diameters from 6 to 60 inches.

7. Inside Diameter: [_____ inches] [As indicated on the Drawings].

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas to receive column forms. Notify Architect if areas are not acceptable. Do not begin erection until unacceptable conditions have been corrected.

3.2 ERECTION

- A. Place and brace column forms in accordance with manufacturer's instructions. At a minimum, forms must be secured at the base and at the top of the form. Additional mid-point bracing may be required for column heights in excess of 12 feet
- B. Erect forms at locations and to elevations as indicated on the Drawings.
- C. Erect column forms plumb. Bracing must be adequate to maintain plumb of column form throughout pouring and curing of concrete.
- D. Avoid damaging interior surface of forms.
- E. Waterproof and reinforce openings cut into forms.
- F. Do not use forms that are out-of-round, deformed, damaged, or contain defects that could impair concrete surface.
- G. Protect forms from rain and snow if work is delayed and forms have been positioned for placing concrete.
- H. Place waterproof sheeting over top of forms to prevent damage to interior surface by rain or snow.
- I. Do not allow forms to stand in water or snow before placing concrete.

3.3 PLACING CONCRETE

- A. Place concrete as specified in Section 03300, unless otherwise specified in this section.
- B. Do not place concrete if column forms are wet.
- C. Apply form release coating to interior surface.
- D. Place concrete at pour rate in accordance with manufacturer's instructions. Sonotube RainGuard is sold in standard lengths of 12 feet. Sonotube Commercial is sold in standard lengths of 20 feet. Either form can be poured to this full height without pour rate restrictions, as indicated on product label. For lengths in excess of these standards, call for instructions

- E. Do not touch interior surface of forms with vibrator.
- F. Do not vibrate concrete from exterior of forms.

3.4 REMOVAL

- A. Remove column forms in accordance with manufacturer's instructions.
- B. Adhesion of Concrete to Form increases over time. If removal of the form is required, remove as soon as operations will not damage concrete, a minimum of 24 hours and a maximum of 5 days after placing concrete is recommended.
- C. Prevent damage to concrete from form removal.
- D. Removal of the form is not necessary except as required by Engineering design or local Building Code

Specifier Notes: Delete protection for the concrete columns if not required.

3.5 PROTECTION

A. Protect concrete columns during remaining construction by placing form halves loosely around columns and securing. Ensure concrete surface is fully dry.

END OF SECTION