

SECTION 09212

**SPRAYING OF ACOUSTIC CEILINGS SPECIFICATION GUIDE
SONA SPRAY “FC” “DURA-K”**

1.0 SCOPE OF WORK:

The work shall include all materials, equipment, labor and services required to install a sprayed cellulose fiber acoustical finish system on interior surfaces in accordance with the drawings and specifications.

1.1 SUBMITTALS:

Provide two copies of independent test reports of:

NRC Values per ASTM C-423 conducted by a NVLAP certified testing laboratory.

| | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---------|------------|------------|------------|-------------|-------------|-------------|------------|
| 0.50”* | .08 | .16 | .46 | .87 | 1.07 | 1.12 | .65 |
| 0.75”** | .25 | .36 | .74 | .98 | .99 | .99 | .75 |
| 1.00”* | .12 | .38 | .88 | 1.16 | 1.15 | 1.15 | .90 |

*on solid backing ** on lath/plaster

2.0 MATERIALS:

The sprayed fiber system shall consist of white cellulose fibers treated with fire retardant chemicals and mixed with adhesive diluted at the rate of **3 parts water to 1 part adhesive** to achieve the “**Dura-K**” bond and compression strength. The system shall contain no natural or man-made mineral fibers such as asbestos, rock wool or glass fiber.

2.1 DELIVERY & STORAGE:

All materials shall be delivered to the job site and stored until used in sealed, original containers, marked by the manufacturer with a description of the contents, the date of manufacture and the lot number. Storage shall be in clean, dry spaces. The temperature of spaces used for adhesive emulsion storage shall be maintained above freezing at all times.

2.2 MATERIALS TESTING:

The finish system shall have been tested and the test results documented by the manufacturer in accordance with standard test methods as follows:

2.21 FIRE SAFETY:

| <i>PROPERTY TESTED</i> | <i>RESULTS</i> | <i>TEST METHOD</i> |
|------------------------|----------------|--------------------|
| Fire Resistance | Class A | ASTM-E-119 |
| Flame Spread Index | 5 | ASTM-E-84/UL723 |
| Smoke Developed | 5 | ASTM-E-84/UL723 |
| Fire Hazard Rating | Class I | FM Test Procedures |
| Fire Retardant Ctg. | Qualifies | FM Test Procedures |

B. Manufacturers written certification that product contains no asbestos, fiberglass or other man made mineral products.

2.22 PHYSICAL CHARACTERISTICS:

| <i>PROPERTY TESTED</i> | <i>RESULTS</i> | <i>TEST METHOD</i> |
|-----------------------------------|------------------|--------------------|
| Light Reflectivity | 73+ | ASTM C-523 |
| Air Erosion | .018 gms/cf max | E-859 |
| Moisture Absorption | 13% max | C-739 |
| Bond Strength | >900 psf | E-736 |
| Noise Reduction Coefficient (NRC) | .65 min @ ½ in. | C-423 |
| Thermal Resistance (R) | 4.7 min. @ 1 in. | C-518 |
| Dry Density | 5 pcf ± pcf | - |
| Compression Strength | >600 psf | E-736 |

2.3 CODE & REGULATION COMPLIANCE:

The system shall have been submitted and accepted, approved, listed, or meets the following code and regulatory agencies:

| | | |
|------------------|------------|-----------------------------|
| Factory Manual | B.O.C.A | P.O.U.P (acute toxicity of |
| City of New York | I.C.B.O. | therm. decomp. of products) |
| U.S. Government | S.B.C.C.I. | |

The manufacturers' documentation of such agency acceptance, approval or listing shall include reference numbers identifying the applicable agency report or specification.

2.4 MANUFACTURER AND PRODUCT QUALIFICATION:

The system shall be International Cellulose Corporation, 12315 Robin Boulevard; Houston, TX 77045, 800-444-1252 **K-13 Sona Spray “fc” “Dura-K”** or approved alternate. An alternate may be approved by

provided complete documentation of its compliance with this specification and a minimum 15 square inch sample of the proposed system is submitted to _____, not less than 10 working days before the bid date.

2.5 PRODUCT GUARANTEE:

The manufacturer shall guarantee its products to be free from defects in materials and workmanship present at the time of shipment.

3.0 EXECUTION:

3.1 CONTRACTOR QUALIFICATIONS:

Contractor shall provide a copy of his license to apply the materials and the name of the person (s) who will apply the materials with a resume of his or her training and experience including **a list of at least 10 comparable jobs he or she has completed successfully**, the name of the building owner, its location, the nature and size of the area sprayed and the name and phone number of a contact person, operator, general contractor, or architect who can provide information on the quality of the materials and workmanship achieved on each job. **Installers shall be Level III certified applicators as trained and tested by International Cellulose Corporation. Proof of certification shall be required on site and throughout the application process.**

3.2 CONTRACTOR INSURANCE:

Contractor shall maintain insurance coverage for the duration of the work specified herein as follows:

| <i>TYPE</i> | <i>LIMITS OF LIABILITY</i> |
|------------------------------------|----------------------------|
| Comprehensive Automobile Liability | \$250/500M-100M |
| Comprehensive General Liability | \$300/100M |
| Business Catastrophe Liability | \$2,000M |

3.3 PRELIMINARY INSPECTION BY CONTRACTOR:

Contractor shall inspect all surfaces to be sprayed and any conditions which might detract from the quality of the finished work shall be reported in writing to _____. No work may proceed until such conditions are corrected.

3.4 APPLICATION:

Material shall be spray applied in accordance with the manufacturers' instruction **at a nominal thickness of** _____ and shall be of uniform color, density and texture free of irregularities, bumps, waves, depressions, loose unbonded material or thin spots. Overspray all completed surfaces with adhesive to lock down any loose material and protect against flaking. The Sona Spray shall be installed using the "Dura-K" style which will achieve the high density durable finish required. All edges at walls and fixtures shall be tamped and cut to produce a straight line of demarcation, leaving a natural and consistent appearance to all cut off points. Contractor shall retain the label information or the containers from both liquid and dry materials each day applied and make them available to the owner at the end of the day to confirm that the materials applied and application rate meet the specifications. Walls, floors, fixtures, and furniture shall be protected against over spray and structural members which can not be protected shall be cleaned of any unavoidable over spray promptly.

3.5 INSPECTION BY OWNER:

Contractor shall provide access to the work for inspection by owner at any time during the course of the work. Any materials or workmanship, which fails to meet the specifications herein, shall be repaired or replaced to the satisfaction of the owner.

3.6 CLEAN-UP:

The contractor shall, to the extent practicable, clean up the work site as the job progresses and shall not allow waste material, supplies and equipment to accumulate and interfere with access to the work site or other areas of the building. Promptly upon completion of the work, contractor will remove all waste material from the building and leave the work site broom clean and in good order. All over spray, spills and other misplaced material shall be removed to the satisfaction of the owner.

3.7 COMPLIANCE WITH LAWS & REGULATIONS:

Contractor shall comply with all applicable laws and regulations particularly those relating to safety, health and environmental protection.

3.8 GUARANTEE:

The completed work shall be guaranteed against defects in materials and workmanship for a period of one year from the date of completion of the work. Defective workmanship will be corrected free of charge to owner. Defective materials will be replaced. This guarantee shall include chipping or flaking of the product.

4.0 SUMMARY OF SUBMITTALS:

Contractor shall include with its bid proposal the following material:

- a. Resumes of officers, managers and supervisory personnel who may be responsible for the work indicating experience and/or training, along with copies of the Level III certification cards which qualifies them for the responsibility.
- b. List of at least 10 comparable jobs satisfactorily completed by the contractor indicating name, address, and phone number of owner and/or architect who is familiar with the quality of materials and workmanship provided on each job.
- c. Documentation indicating compliance with the requirements of these specifications in general and with Sections 2.2, 2.3 and 3.2 in particular.
- d. Manufacturers' catalog cuts describing the proposed system.
- e. A sample of the proposed system at least ½" thick and having a surface area of not less than 15 square inches.