SECTION 27 05 53
IDENTIFICATION FOR COMMUNICATIONS SYSTEMS

PART 1 – GENERAL

1.01 DESCRIPTION
A. The work covered by this section of the Specifications includes all labor necessary to perform and complete such construction, all materials and equipment incorporated or to be incorporated in such construction and all services, facilities, tools and equipment necessary or used to perform and complete such construction. The work of this section shall include, but is not limited to, the following:

1. Labeling systems and accessories.

1.02 QUALITY ASSURANCE
A. Refer to Section 27 00 00 for general details.

1.03 CODES, STANDARDS, AND GUIDELINES
A. Except as modified by governing codes and by the Contract Documents, comply with the applicable provisions and recommendations in Section 27 00 00.

1.04 SUBMITTALS
A. Refer to Section 27 00 00 for general details.
B. Shop Drawings:
1. None Required
C. Submit Manufacturer's Cut Sheets for the following:
1. Any products not specifically listed in the PRODUCTS section shall require a submittal of the manufacturer’s cut sheets.

1.05 IDENTIFICATION
A. All elements (facilities, underground elements, conduits, cables, ground wires, racks, jacks, circuits, boxes, etc.) of the telecommunication system are to be labeled.
B. See PRODUCTS section for specific details

1.06 DEFINITIONS
A. Fiber Types – The usage of a fiber within the campus physical topology determines it’s Fiber Type
1. RIFOC = Room To Room fiber inside a building
2. BFOC = Building Fiber Optic Cable
3. SFOC = Spoke Fiber Optic Cable
4. RFOC = Ring Fiber Optic Cable
5. XFOC = OSP Fiber Optic Station Cable

B. Room Number – If the location is a Telecommunications room, use its Telecommunications Room Designation. If the location is an end user space, use its room number. If the location is an end user space, and permanent room numbers are not yet available, then use the construction room number and preface it with “C”.

C. TR ID – Telecommunications Room Designation. Identification for a telecom room composed of two numeric digits. The first digit is the floor the serving TR is on, the second digit is the designation of the serving TR if there is more than one on that floor.


E. See Section 27 Appendix A for additional definitions.

1.07 WARRANTY

A. Refer to Section 27 00 00 for general details.
PART 2 – PRODUCTS

2.01 PRODUCT CONSISTENCY

A. Product Consistency: Any given item of equipment or material shall be the product of one manufacturer throughout the facility. Multiple manufacturers of any one item will not be permitted.

2.02 BRASS TAGS

A. Tags are to be 18 gauge brass, 1¼” in diameter with a 3/16 attachment hole.
B. Labeling on the tag is to be stamped with ¼” lettering.
C. Manufacturer/Product: ULine Part #: S-11898 or Equivalent

2.03 LABELS FOR STATION CABLES

A. 3/4” white nylon with black lettering
B. Manufacturer/Product: 3M Part# PLFN-WHT-3/4

2.04 FACEPLATE LABELS FOR OUTLETS

A. Typewritten windowed inserts, template to be provided by campus telecommunications representative.
B. Manufacturer/Product: N/A

2.05 TERMINATION LABELS (DSTRIPS) FOR WALLFIELD

A. Template to be provided by campus telecommunications representative.
B. Manufacturer/Product: N/A

2.06 LABELS FOR INDOOR RACKS, CABINETS AND PANELS

A. 3/4” white nylon with black lettering
B. Manufacturer/Product: 3M Part# PLFN-WHT-3/4

2.07 LABEL PLATE FOR OUTDOOR CABINETS

A. Anodized aluminum name plate engraved with “TELCOM”.
B. To be provided by campus telecommunications representative.
C. Manufacturer/Product: N/A
PART 3 – EXECUTION

3.01 GENERAL

A. Conduits

1. Intrabuilding Conduits (Brass Tag)
   a. Line 1: Room Number or TR ID for each end of the conduit.
   b. Line 2: Number of this conduit related to conduits with the same endpoints
   c. Label both ends of a conduit with identical tags.
   d. See Section 27 Appendix B for examples

2. Interbuilding Conduits (Brass Tag)
   a. Line 1: Label with designation for the far end, Building Abbreviation and Room Number, or appropriate designation for an Underground Facility.
   b. Line 2: Label with designation for the far end, Building Abbreviation and Room Number, or appropriate designation for an Underground Facility.
   c. Line 3: Number of this conduit related to conduits with the same endpoints. Underground conduits shall be labeled as per the butterfly drawings.
   d. Label both ends of a conduit with identical tags.
   e. See Section 27 Appendix B for examples

B. Copper Cables

1. Intrabuilding Backbone Copper Cables (Brass Tag)
   a. Line 1: Copper Type (R for Riser)
   b. Line 2: Room Number or TR ID for each end of the cable.
   c. Line 3: Number of pairs in relation to the total between the two endpoints
   d. Label both ends of a conduit with identical tags.
   e. See Section 27 Appendix B for examples

2. Interbuilding Backbone Copper Cables (Brass Tag)
   a. Line 1: Copper Type (CU for OSP Copper)
   b. Line 2: Building Number for each end of the cable.
c. Line 3: Number of pairs in relation to the total between the two endpoints

d. Label both ends of a cable with identical tags.

e. See Section 27 Appendix B for examples

3. Copper Station Cable / Outlet ID

a. Label with the designation for the cables:
   (1) First digit is the floor the serving TR is on.
   (2) Second digit is the designation of the serving TR if there are more than one on that floor.
   (3) Third digit is the floor the station cable terminates on.
   (4) Last three digits are the unique number for that outlet.

b. Examples:
   (1) 111001 (TR is on the 1st floor, is the first TR on that floor, the outlet is on the first floor, and is number 001.)
   (2) 012075 (TR is in the basement, is the first TR in the basement, the outlet is on the second floor, and is number 075.)
   (3) 323015 (TR is in on the 3rd floor, is the 2nd TR on the 3rd floor, the outlet is on the 3rd floor, and is number 015.)

c. Label both ends of a cable with identical tags.

d. See Section 27 Appendix B for examples

4. OSP Copper Station Cables (Brass Tag)

a. Line 1: Copper Type (CU for OSP Copper)

b. Line 2: Building Number for each end of the cable.

c. Line 3: Station Cable Number

d. Label both ends of a cable with identical tags.

e. See Section 27 Appendix B for examples

C. Fiber Optic Cables

1. Intrabuilding Fiber Optic Backbone Cables (Brass Tag)

a. Line 1: Fiber Type (See Definitions)

b. Line 2: Room Number or TR ID for each end of the cable.
c. Line 3: Fiber Count

d. Label both ends of a conduit with identical tags.

e. See Section 27 Appendix B for examples

2. Interbuilding Fiber Optic Backbone Cables (Brass Tag)

a. Line 1: Fiber Type (See Definitions)

b. Line 2: Building Number for each end of the cable.

c. Line 3: Fiber Count

d. Label both ends of a cable with identical tags.

e. See Section 27 Appendix B for examples

3. Fiber Optic Station Cables

a. Label with the designation for the cables:
   (1) Designation is preceded with an F
   (2) First digit is the floor the serving TR is on.
   (3) Second digit is the designation of the serving TR if there are more than one on that floor.
   (4) Third digit is the floor the station cable terminates on.
   (5) Last three digits are the unique number for that outlet.

b. Example: F111001 (TR is on the 1st floor, is the first TR on that floor, the outlet is on the first floor, and is number 001.

4. OSP Fiber Optic Station Cables (Brass Tag)

a. Line 1: Fiber Type (See Definitions)

b. Line 2: Building Number for each end of the cable.

c. Line 3: Station Cable Number prefaced with F

d. Label both ends of a cable with identical tags.

e. See Section 27 Appendix B for examples

D. Grounding & Bonding

1. Innerbuilding Grounding/Bonding Conductors (Brass Tag)

a. Line 1: Ground Type (See Definitions)
b. Line 2: Room Number or TR ID for each end of the conductor.
c. Label both ends of a conductor with identical tags.
d. See Section 27 Appendix B for examples

2. Interbuilding Grounding/Bonding Conductors (Brass Tag)
a. Line 1: Ground Type (See Definitions)
b. Line 2: Building Number that is closest to the core of the network.
c. Line 3: Building Number that is farther from the core of the network.
d. Label both ends of a conductor with identical tags.
e. See Section 27 Appendix B for examples

3. Ground Bars (Brass Tag)
a. Line 1: Ground Bar Type (See Definitions)
b. Line 2: Building and room number where the ground bar is located.
c. See Section 27 Appendix B for examples

E. Wallfield
   1. Labels are made from a template provided by the campus telecommunications representative.
   2. See Section 27 Appendix B for examples

F. Patch Panels
   1. Label each jack with appropriate jack number.
   2. See Section 27 Appendix B for examples

G. Racks
   1. Label with designation for rack number within that telecommunications room. Rack number starts against the wall with Rack #1, and increments as racks are added.
   2. See Section 27 Appendix B for examples

H. Cabinets
   1. Label with “TELCOM”
   2. See Section 27 Appendix B for examples
3.02 QUANTITIES

A. Quantities of system elements shown on the drawings are illustrative only and are meant to indicate the general configuration of the work. The Contractor is responsible for providing the correct quantities of materials to construct a system that meets the intent of these Specifications and the relevant codes.

3.03 INSTALLATION

A. Installation of all identification type products shall be as detailed in each individual section, and as per the manufacturer’s printed information.

3.04 GROUNDING & BONDING

A. N/A

3.05 TESTING

A. N/A

3.06 ACCEPTANCE

A. Once the installation has been completed and the campus representative is satisfied that all work is in accordance with the Contract Documents, the representative will notify the Contractor in writing.

3.07 RECORD (ASBUILT) DRAWINGS

A. None Required

END OF SECTION
## DOCUMENT VERSION CONTROL

<table>
<thead>
<tr>
<th>REVISION</th>
<th>DATE</th>
<th>AUTHOR</th>
<th>REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>08/07/2012</td>
<td>C. WHITEHOUSE</td>
<td>INITIAL DOCUMENT CREATION</td>
</tr>
<tr>
<td>2</td>
<td>3/13/2013</td>
<td>CJW &amp; CLC</td>
<td>PRIMARY REVIEW COMPLETE</td>
</tr>
</tbody>
</table>