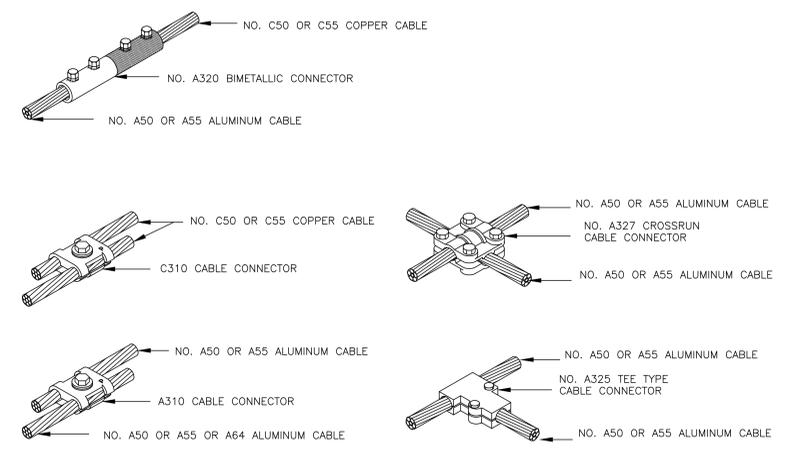
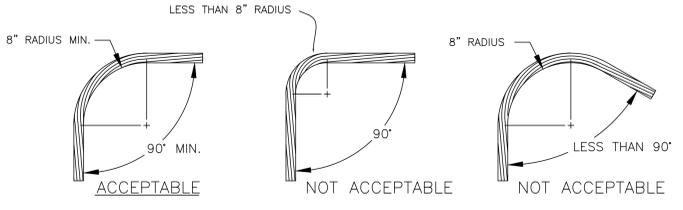


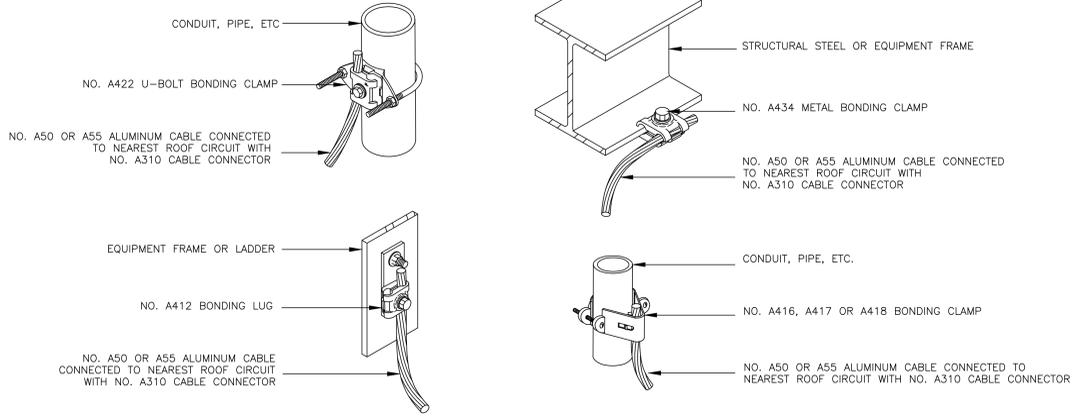
three inches = one foot
 one and one-half inches = one foot
 one inch = one foot
 one inch = one foot
 three-quarters inch = one foot
 one-half inch = one foot
 one-half inch = one foot
 three-eighths inch = one foot
 one-quarter inch = one foot
 one-eighth inch = one foot
 one-eighth inch = one foot



1 TYPICAL CABLE SPICERS
NOT TO SCALE

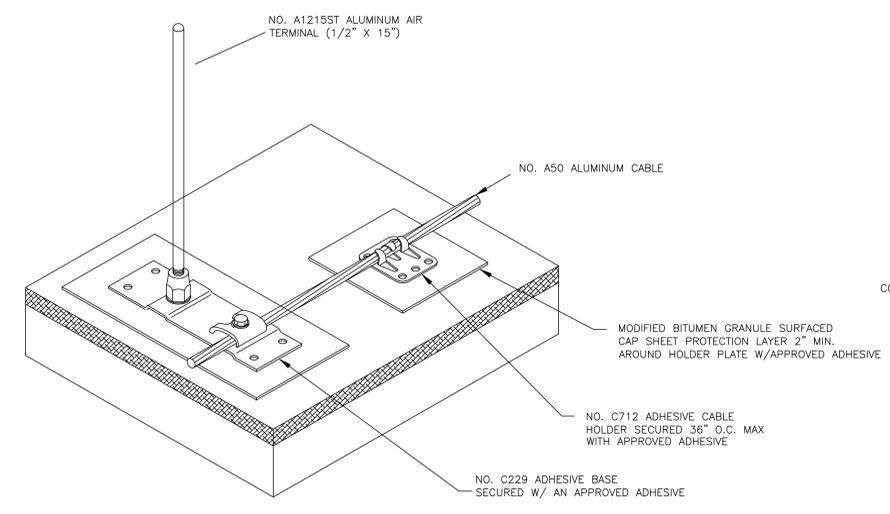


1 TYPICAL - ACCEPTABLE CABLE BENDS
NOT TO SCALE

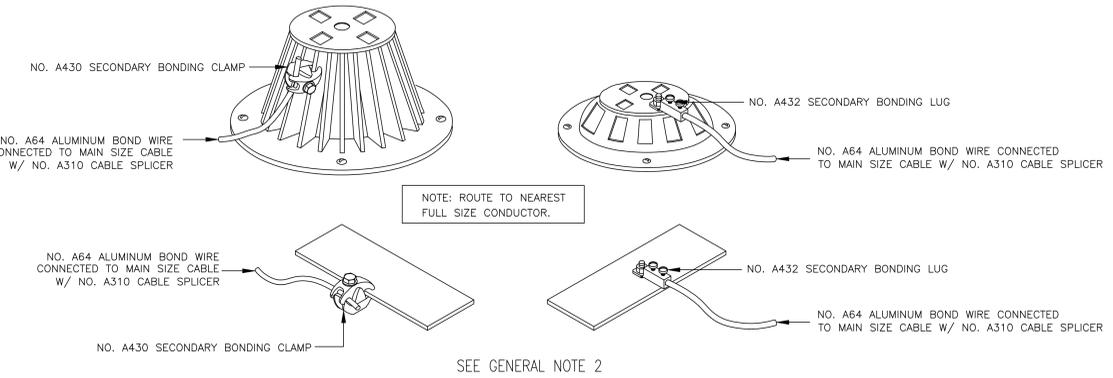


NOTE: FIELD VERIFY PROPER BONDING CONNECTION AND LOCATION
SEE GENERAL NOTE 9

2 TYPICAL ROOF EQUIPMENT BONDS
NOT TO SCALE

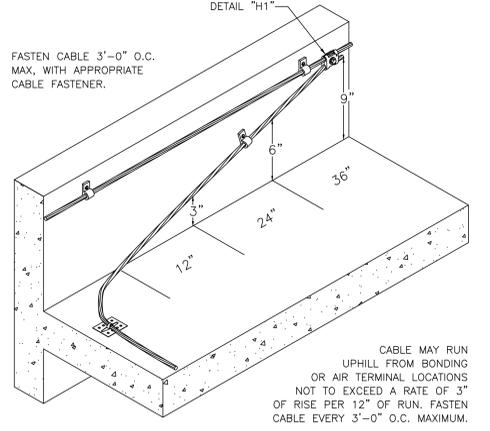


3 TYPICAL ADHESIVE AIR TERMINAL
NOT TO SCALE



SEE GENERAL NOTE 2

4 TYPICAL SECONDARY BOND
NOT TO SCALE



NOTE: CONDUCTOR SHALL INTERCONNECT ALL AIR TERMINALS AND SHALL FORM A TWO-WAY PATH FROM EACH AIR TERMINAL HORIZONTALLY, DOWNWARD OR RISING AT A RATE NOT EXCEEDING 3" PER FOOT (76.2mm) TO CONNECTING WITH GROUND TERMINALS AS APPROVED BY NFPA 780 AND UL 96A.

5 TYPICAL - GRADUAL RISE CABLE RUN
NOT TO SCALE

LIGHTNING PROTECTION GENERAL NOTES

1. THE EXISTING FACILITY IS PROVIDED WITH A LIGHTNING PROTECTION SYSTEM. TYPICALLY, THE SYSTEM CONSISTS GROUNDED METAL OBJECTS BONDED TO THE LIGHTNING PROTECTION SYSTEM, INCLUDING, BUT NOT LIMITED TO STRUCTURAL STEEL SUPPORTS, RAILINGS, LADDERS, ROOF HATCHES, FLAGPOLES, HVAC EQUIPMENT, SCUPPERS, ROOF DRAINS, CAMERAS, WINDOW WASHING TIEBACKS, VENT PIPES, METAL FLASHING, GRAVEL STOPS, LOUVERS, DOOR FRAMES, ANTENNAS, ETC.
2. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING LIGHTNING PROTECTION CABLES THAT WILL REQUIRE DISCONNECTION AND REMOVAL TO ACCOMMODATE THE ROOF REPLACEMENT.
3. THE CONTRACTOR SHALL PROVIDE NEW ALUMINUM LIGHTNING PROTECTION CABLES FROM THE EXISTING COPPER MAIN CONDUCTORS AROUND THE PERIMETER OF EACH ROOF TO THE EXISTING GROUNDED METAL OBJECTS ON THAT ROOF AS REQUIRED. PROVIDE BIMETALLIC SPICES WHERE CHANGING FROM COPPER TO ALUMINUM.
4. ALL WORK SHALL BE PERFORMED BY A UL LISTED INSTALLER AND SHALL COMPLY WITH NFPA 780 AND UL 96 & 96A AND VA LIGHTNING PROTECTION SPECS.
5. ALL WORK SHALL BE INSPECTED BY A UL REPRESENTATIVE. A UL LETTER OF FINDINGS FOR THE AREA OF WORK SHALL BE PROVIDED TO THE OWNER AFTER INSPECTION.
6. CONDUCTOR BEND SHALL NOT FORM A SHARPER ANGLE THAN 90 DEGREES OR HAVE A RADIUS LESS THAN 8 INCHES.
7. COPPER LIGHTNING PROTECTION MATERIALS SHALL NOT BE PLACED ON ALUMINUM, GALVANIZED STEEL, GALVALUME SURFACES OR ANY OTHER DISSIMILAR METAL SURFACES, PAINTED OR NOT, NOR SHALL ALUMINUM MATERIALS BE PLACED ON COPPER SURFACES.
8. EACH INDIVIDUAL ITEM OF LIGHTNING PROTECTION MATERIALS ON THE ROOF PLANS ARE NOT SHOWN. WE HAVE SHOWN TYPICAL DETAILS ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MISCELLANEOUS ACCESSORIES AS REQUIRED FOR A COMPLETE SYSTEM.
9. ALL ADHESIVE FIXTURES SHALL BE SET WITH AN ADHESIVE COMPOUND COMPATIBLE WITH THE ROOFING MATERIAL. ADHESIVES SHALL BE APPROVED IN ADVANCE BY THE GENERAL CONTRACTOR.
10. CABLE WILL BE FASTENED EVERY 3'-0" O.C. MAXIMUM SPACING.
11. LIGHTNING PROTECTION SYSTEMS SHALL BE INSTALLED IN A NEAT, PROFESSIONAL MANNER.
12. ISOLATED METAL BODIES THAT SHOW NO CONDUCTANCE TO GROUND SHALL NOT REQUIRE BONDING. A GROUNDED METAL BODY WITHIN THE SIX FOOT OF A LIGHTNING PROTECTION CONDUCTOR SHALL BE BONDED TO THE SYSTEM.
13. UTILIZE CLASS I MATERIALS ON 5TH FLOOR ROOF AND BELOW (A50 AND C50 CABLE) AND UTILIZE CLASS II MATERIALS ON THE 6TH FLOOR AND ABOVE (A55 AND C55 CABLE).
14. MODEL NUMBERS, WHERE INDICATED, ARE AS MANUFACTURED BY PREFERRED LIGHTNING PROTECTION. EQUIVALENT PRODUCTS BY APPROVED MANUFACTURERS COMPLYING WITH THE SPECIFICATIONS SHALL BE ACCEPTABLE.
15. CONTRACTOR TO REF. TO FACILITY LIGHTNING PROTECTION SPECIFICATIONS 26 41 00.

Revisions	Date

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Drawing Title
ROOF DETAILS 3

Approved Project Director

Project Title
**REPLACE MAJOR ROOFS
BUILDING # 1**

Location
IOWA CITY VAMC, IOWA

Date
03-13-2012

Checked
RWT

Drawn
REC

Project Number
636A8-11-004

Building Number
BLDG # 1

Drawing Number
1-A16

Dwg. 17 of 18

Office of
Construction
and Facilities
Management

Department of
Veterans Affairs