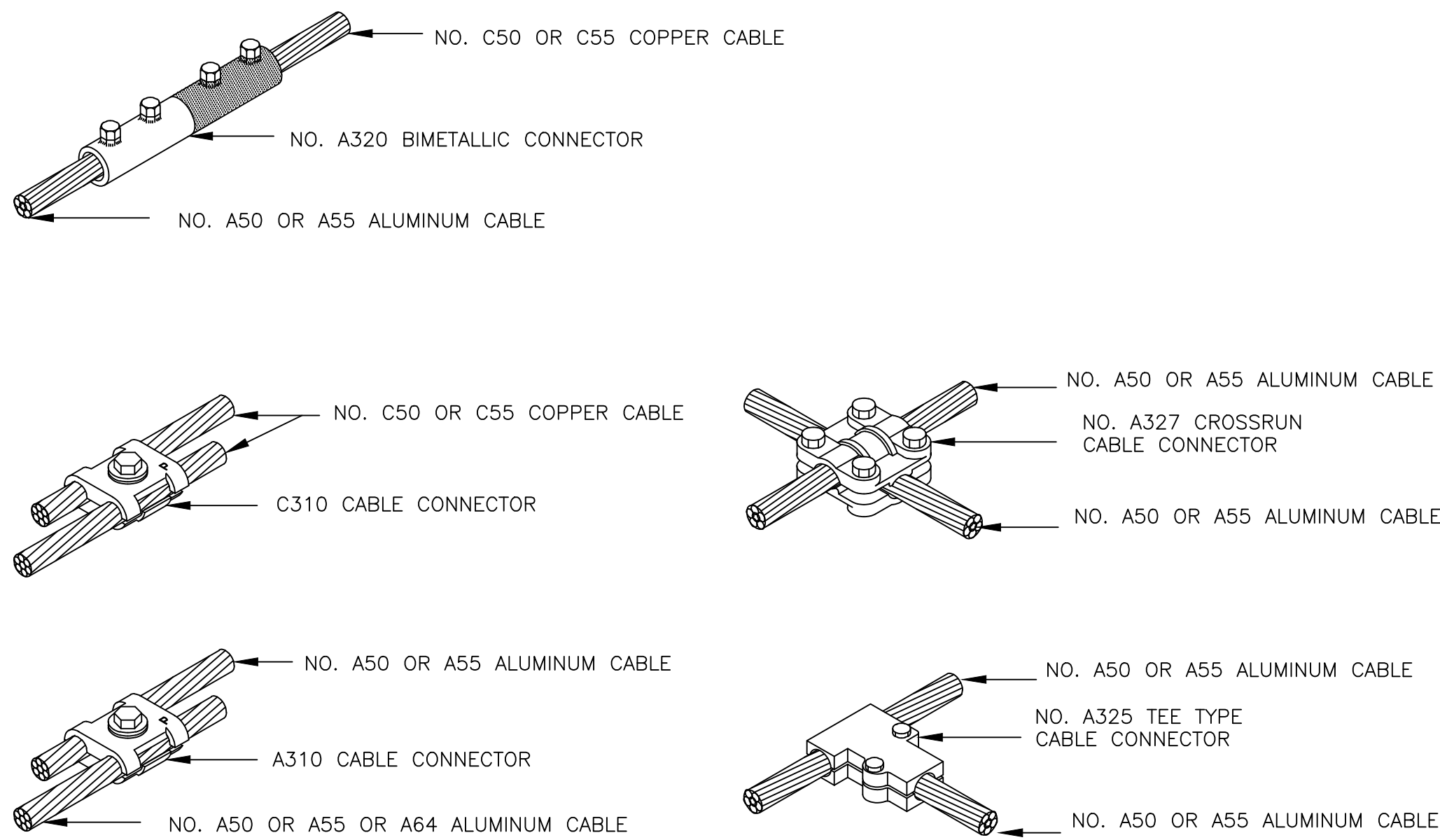
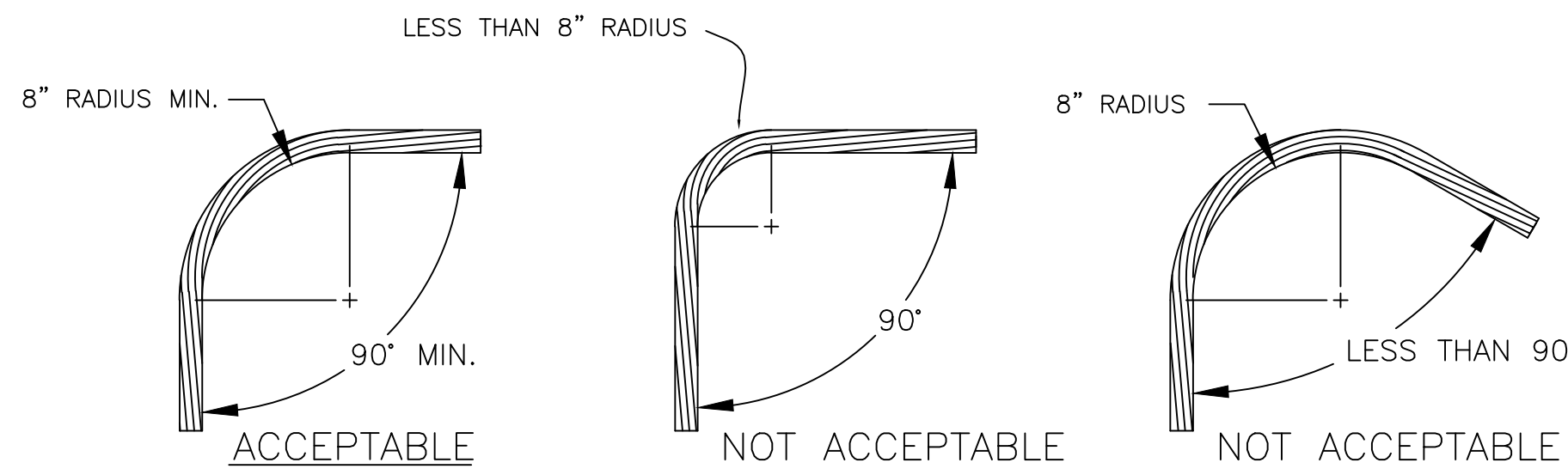


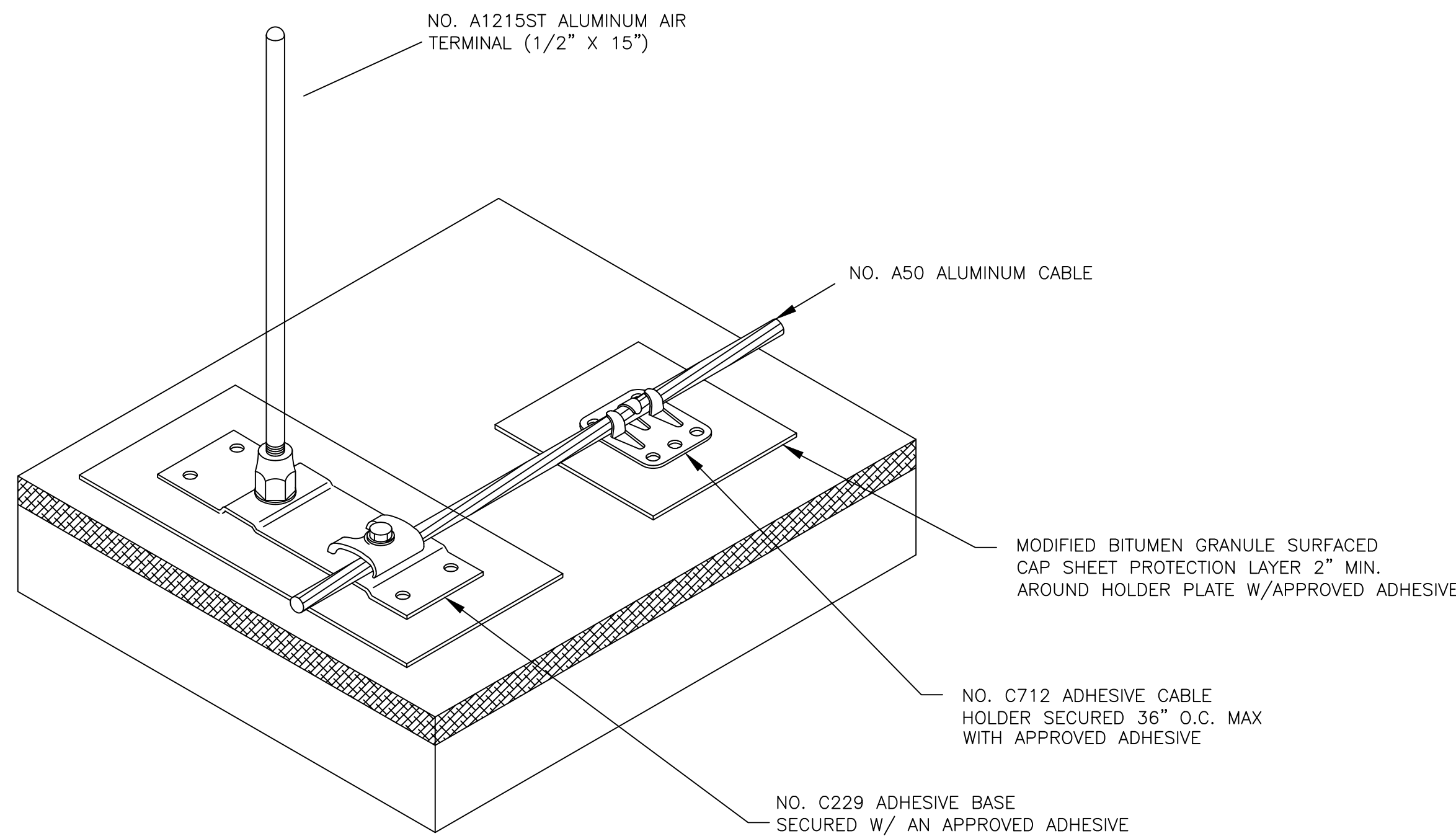
three inches = one foot
one and one half inches = one foot
one inch = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one eighth inch = one foot



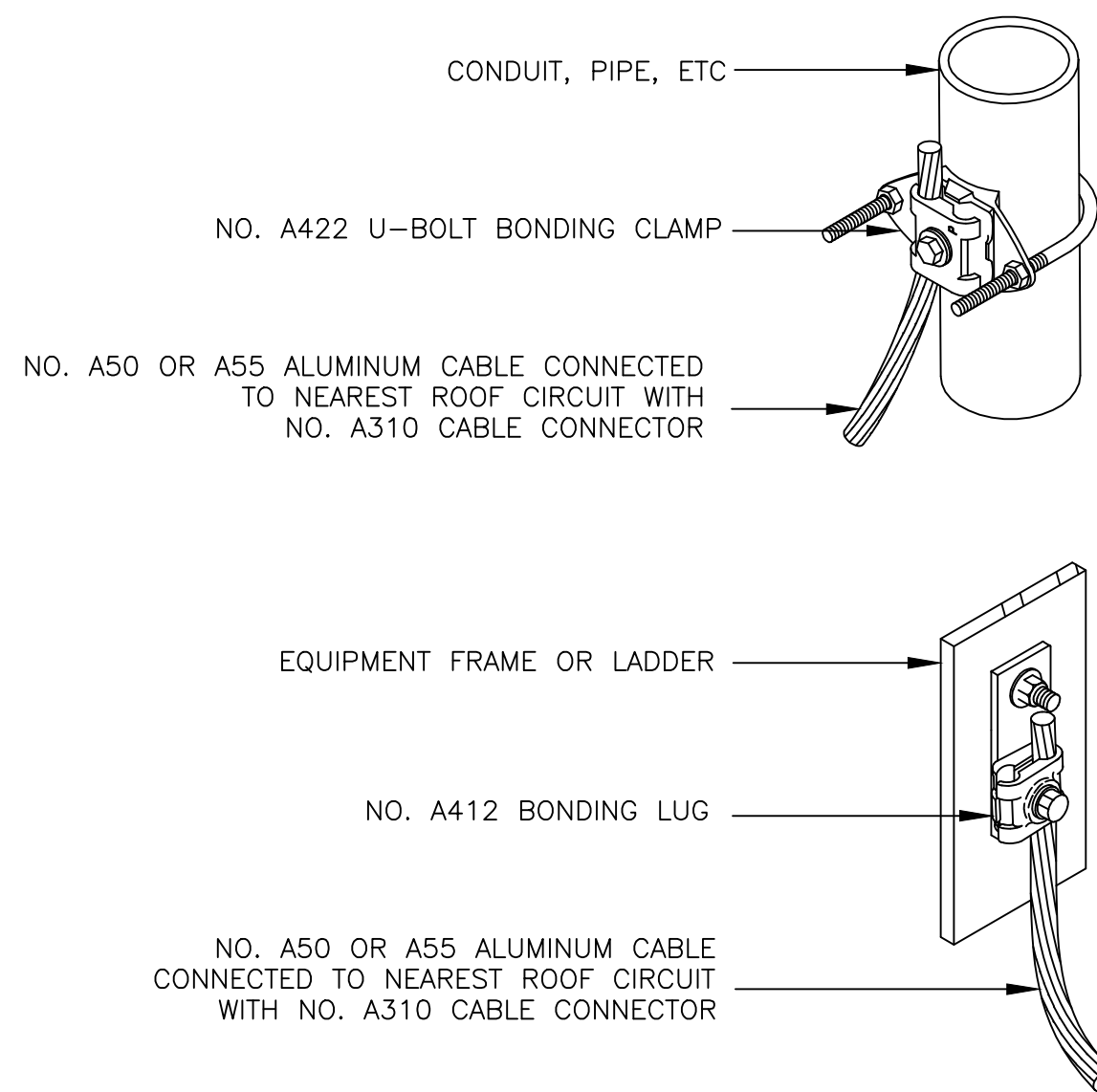
1 TYPICAL CABLE SPICERS
NOT TO SCALE



1 TYPICAL - ACCEPTABLE CABLE BENDS
NOT TO SCALE



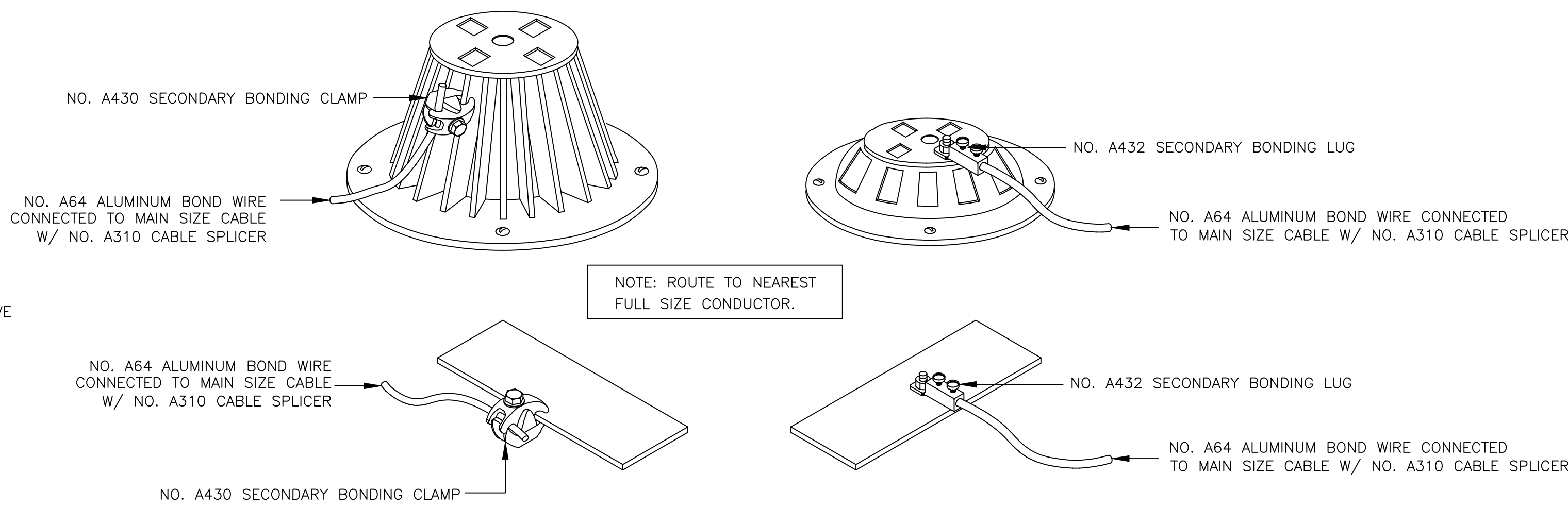
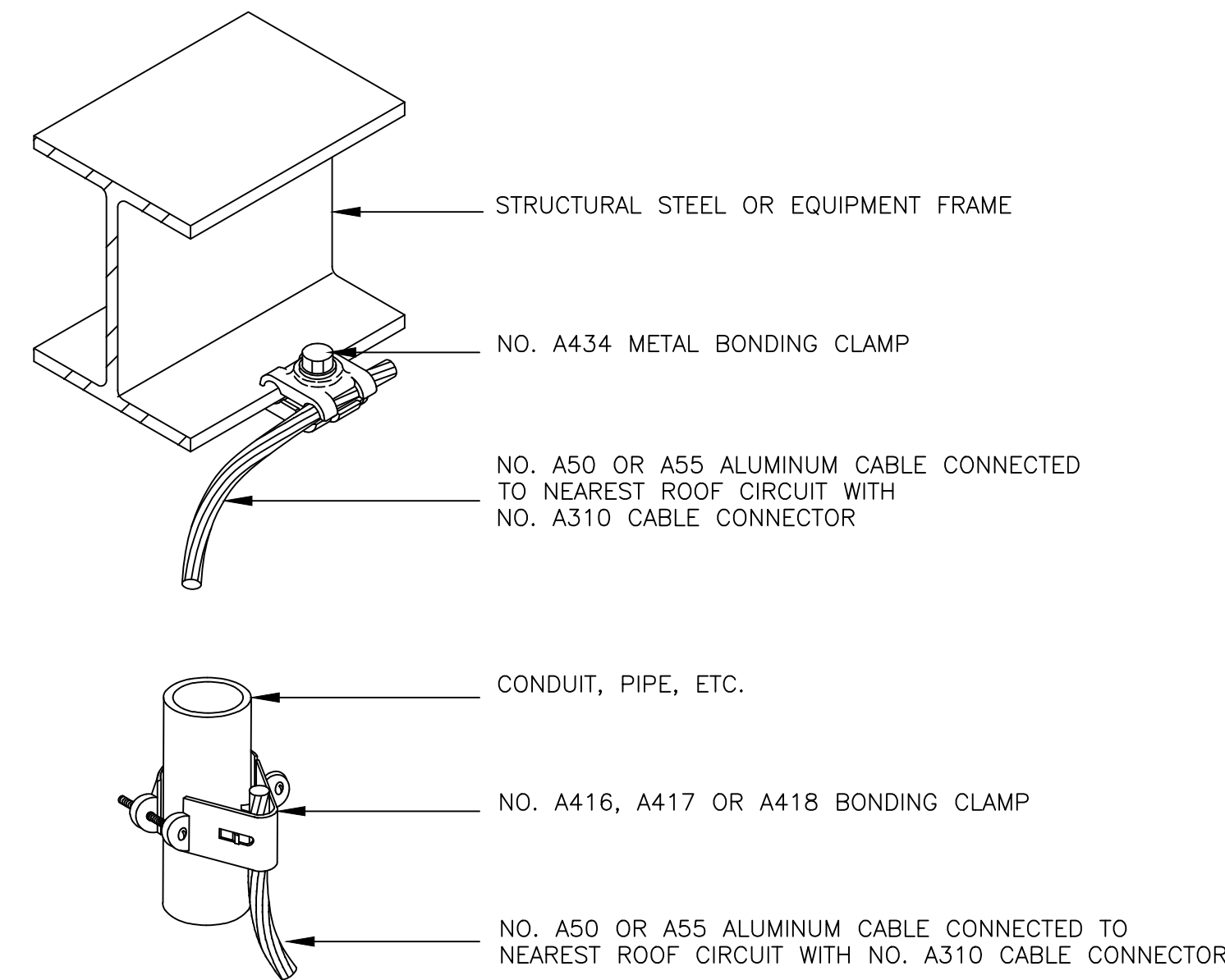
3 TYPICAL ADHESIVE AIR TERMINAL
NOT TO SCALE



NOTE: FIELD VERIFY PROPER BONDING CONNECTION AND LOCATION

SEE GENERAL NOTE 9

2 TYPICAL ROOF EQUIPMENT BONDS
NOT TO SCALE

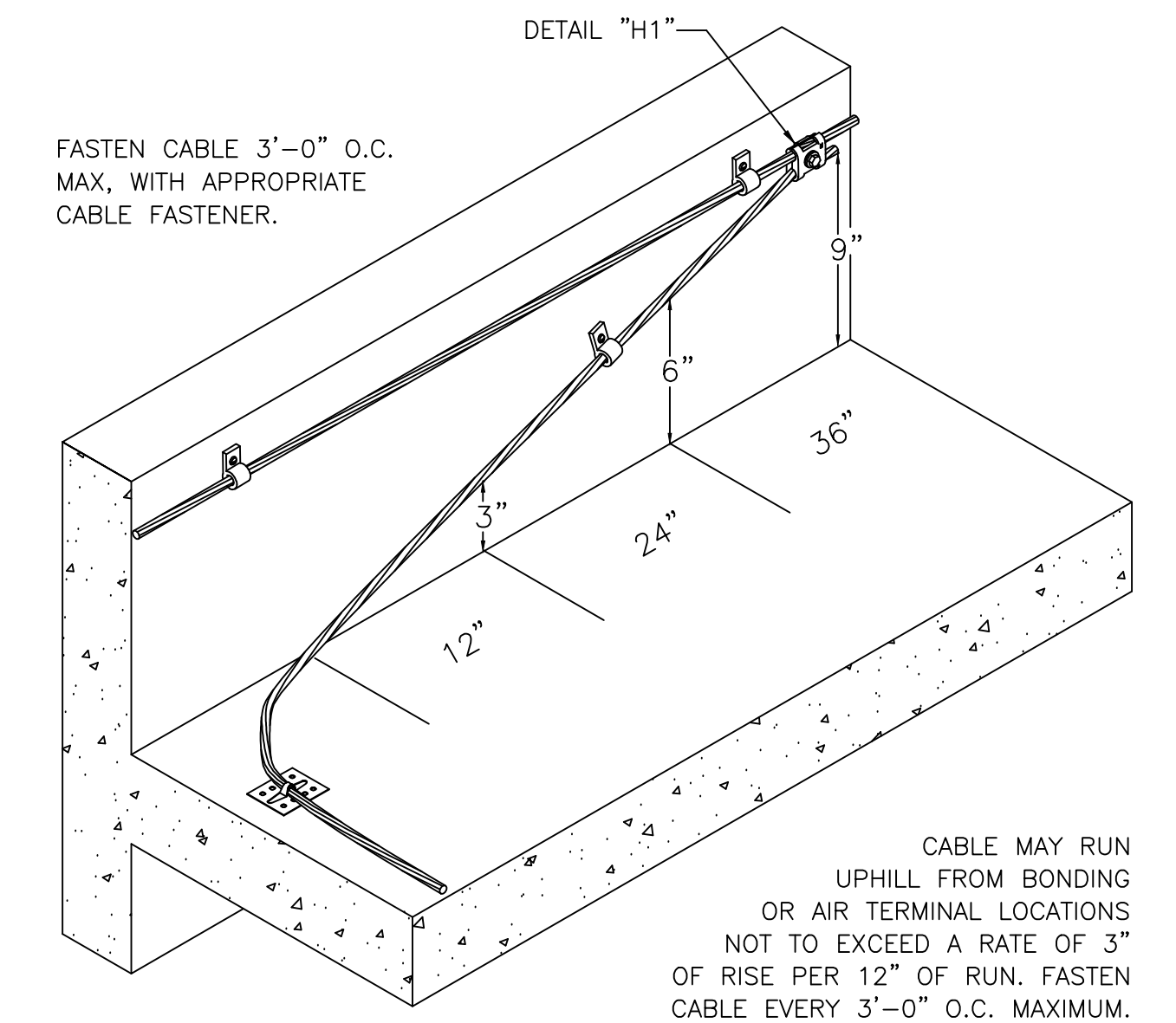


SEE GENERAL NOTE 2

4 TYPICAL SECONDARY BOND
NOT TO SCALE

LIGHTNING PROTECTION GENERAL NOTES

1. THE EXISTING FACILITY IS PROVIDED WITH A LIGHTNING PROTECTION SYSTEM. TYPICALLY, THE SYSTEM CONSISTS OF 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 SPLICES 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.



NOTE:
CONDUCTOR SHALL INTERCONNECT ALL AIR TERMINALS AND SHALL FORM A TWO-WAY PATH FROM EACH AIR TERMINAL HORIZONTALLY, DOWNWARD OR UPWARD 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

Revisions		Date		CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management
				Roofing Consultant: Robert L Dye, LC PO BOX 4581 Overland Park, Kansas, 66204		Industrial Hygiene Consultant: John A. Jurgiel + Associates, Inc. 1810 Craig Road, Suite 207 St. Louis, Missouri 63146		ROOF DETAILS 3	REPLACE MAJOR ROOFS BUILDING # 1	636A8-11-004	
								Approved Project Director	Location	Drawing Number	Department of Veterans Affairs
									IOWA CITY VAMC, IOWA	1-A16	
									Date	Dwg.	
									03-13-2012	17 of 18	
									Checked		
									RWT		
									Drawn		
									REC		