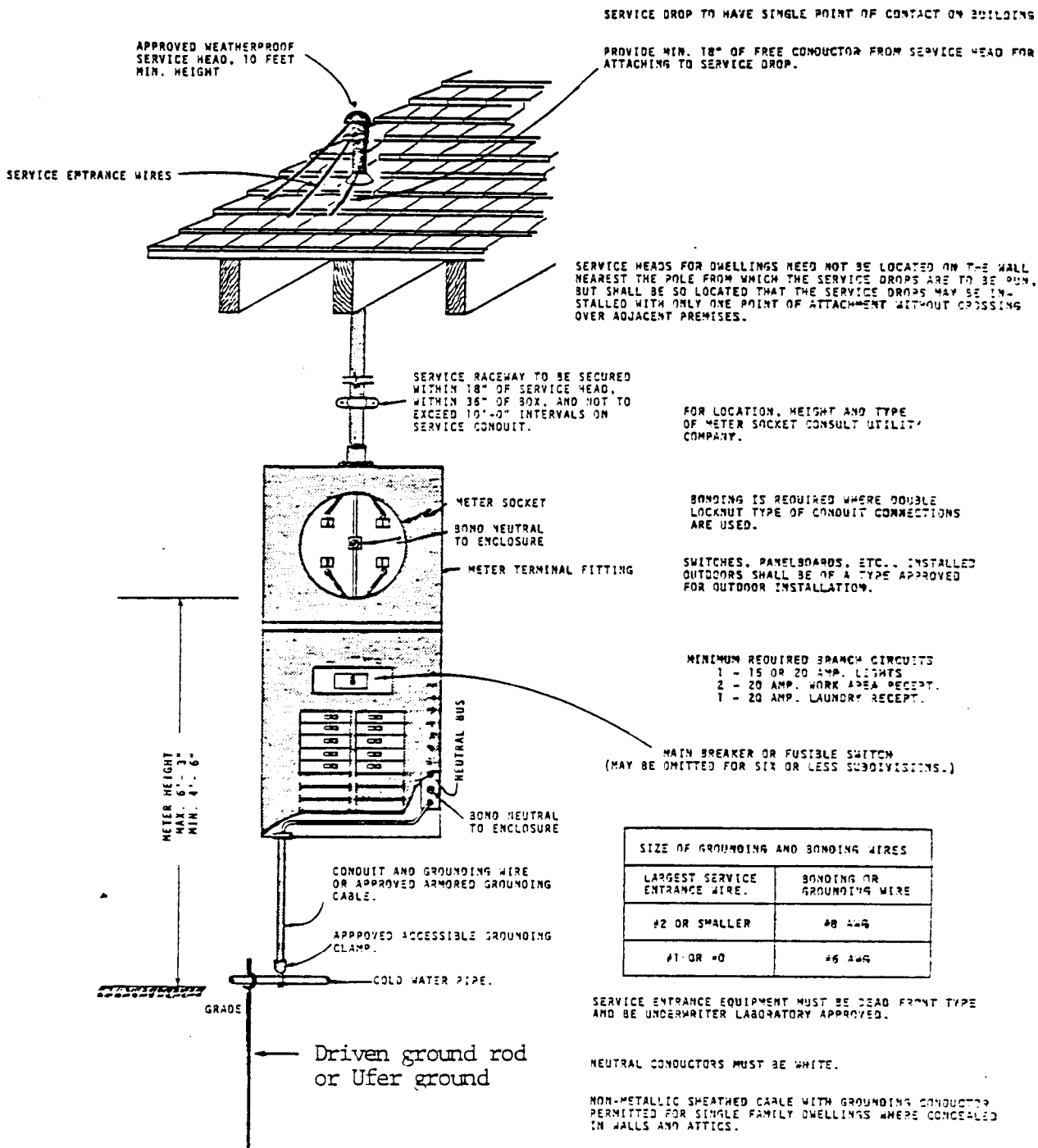


ELECTRICAL DETAILS

SINGLE FAMILY DWELLING



SERVICE DROP TO HAVE SINGLE POINT OF CONTACT ON BUILDING

APPROVED WEATHERPROOF SERVICE HEAD, 10 FEET MIN. HEIGHT

PROVIDE MIN. 18" OF FREE CONDUCTOR FROM SERVICE HEAD FOR ATTACHING TO SERVICE DROP.

SERVICE ENTRANCE WIRES

SERVICE HEADS FOR DWELLINGS NEED NOT BE LOCATED ON THE WALL NEAREST THE POLE FROM WHICH THE SERVICE DROPS ARE TO BE RUN, BUT SHALL BE SO LOCATED THAT THE SERVICE DROPS MAY BE INSTALLED WITH ONLY ONE POINT OF ATTACHMENT WITHOUT CROSSING OVER ADJACENT PREMISES.

SERVICE RACEWAY TO BE SECURED WITHIN 18" OF SERVICE HEAD, WITHIN 36" OF BOX, AND NOT TO EXCEED 10'-0" INTERVALS ON SERVICE CONDUIT.

FOR LOCATION, HEIGHT AND TYPE OF METER SOCKET CONSULT UTILITY COMPANY.

METER SOCKET

BOND NEUTRAL TO ENCLOSURE

METER TERMINAL FITTING

BONDING IS REQUIRED WHERE DOUBLE LOCKNUT TYPE OF CONDUIT CONNECTIONS ARE USED.

SWITCHES, PANELBOARDS, ETC., INSTALLED OUTDOORS SHALL BE OF A TYPE APPROVED FOR OUTDOOR INSTALLATION.

METER HEIGHT
MAX. 6'-3"
MIN. 4'-6"

NEUTRAL BUS

BOND NEUTRAL TO ENCLOSURE

MINIMUM REQUIRED BRANCH CIRCUITS
1 - 15 OR 20 AMP. LIGHTS
2 - 20 AMP. WORK AREA RECEPT.
1 - 20 AMP. LAUNDRY RECEPT.

MAIN BREAKER OR FUSIBLE SWITCH (MAY BE OMITTED FOR SIX OR LESS SUBDIVISIONS.)

CONDUIT AND GROUNDING WIRE OR APPROVED ARMORED GROUNDING CABLE.

APPROVED ACCESSIBLE GROUNDING CLAMP.

COLD WATER PIPE.

GRADE

Driven ground rod or Ufer ground

SIZE OF GROUNDING AND BONDING WIRES

LARGEST SERVICE ENTRANCE WIRE.	BONDING OR GROUNDING WIRE
#2 OR SMALLER	#8 AWG
#1 OR #0	#6 AWG

SERVICE ENTRANCE EQUIPMENT MUST BE DEAD FRONT TYPE AND BE UNDERWRITER LABORATORY APPROVED.

NEUTRAL CONDUCTORS MUST BE WHITE.

NON-METALLIC SHEATHED CABLE WITH GROUNDING CONDUCTOR PERMITTED FOR SINGLE FAMILY DWELLINGS WHERE CONCEALED IN WALLS AND ATTICS.

THIS DRAWING IS INTENDED TO ILLUSTRATE THE REQUIREMENTS; NOT THE MANDATORY ARRANGEMENT

MAXIMUM ALLOWABLE CURRENT CARRYING CAPACITY
IN AMPERES OF
INSULATED CONDUCTORS IN CONDUITS OR CABLES*

Size AWG	Amperes (Copper)	Amperes (Aluminum)
No. 14	15	-
No. 12	20	15
No. 10	30	25
No. 8	40	30
No. 6	55	40
No. 4	70	55
No. 2	95	75
No. 1	110	85
No. 0	125	100

*TW insulation and not more than three conductors in conduit or cables.

NOTE: When installing more than three conductors in conduit or cables, see Note 8, Table 310-16 for derating factors (National Electrical Code).

MAXIMUM NUMBER OF TW CONDUCTORS
IN
CONDUIT OR TUBING

Size AWG	Conduit or Tubing Size					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
No. 14	9	15	25	44	60	99
No. 12	7	12	19	35	47	78
No. 10	5	9	15	26	36	60
No. 8	2	4	7	12	17	33
No. 6	1	2	4	7	10	16
No. 4	1	1	3	5	7	12
No. 2	1	1	2	4	5	9
No. 1	-	1	1	3	4	6
No. 0	-	1	1	2	3	5