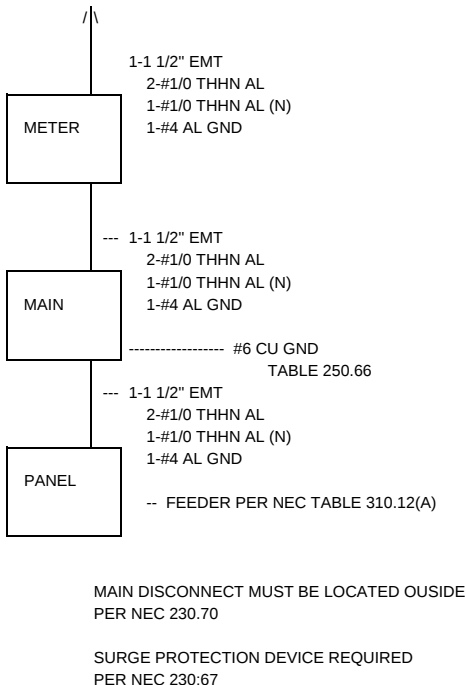


PROJECT NAME	SAMPLE
DWELLING UNIT	PANEL A

NEUTRAL LOAD NEC 120.61	
TOTAL SQ FOOTAGE (1,500 SQ FT X 2 VA) =	3,000 VA
APPLIANCE CIRCUITS (2 X 1,500 VA) =	3,000 VA
LAUNDRY CIRCUITS (1 X 1,500 VA) =	1,500 VA
TOTAL CONNECTED NEUTRAL LOAD	7,500 VA
FIRST 3,000 VA @ 100% (3,000 VA X 1.00) =	3,000 VA
3,000-120,000 VA @ 35% (4,500 VA X 0.35) =	1,575 VA
OVER 120,000 VA @ 25% (0 VA X 0.25) =	0 VA
SUBTOTAL	4,575 VA
RANGE DEMAND	
TABLE 120.55 COLUMN C	
70% OF TABLE 120.55 (8,000 VA X 0.70) =	5,600 VA
DRYER DEMAND	
TABLE 120.54	
70% OF TABLE 120.54 (5,000 VA X 1.00 X 0.70) =	3,500 VA
UNBALANCED MISC LOADS	600 VA
NEUTRAL LOAD VA	14,275 VA
NEUTRAL LOAD (14,275 VA ÷ 240 V) =	59 A
FURTHER DEMAND FACTOR - NEC 120.61(B)(2)	
FIRST 200 A @ 100% (59 A X 1.00) =	59 A
REMAINDER @ 70% (0 A X 0.70) =	0 A
MINIMUM NEUTRAL CONDUCTOR AMPACITY	59 A

$$(2 \times 25' L \times 0.2010 R \times 121.0 A \div 1,000) = 1.2 VD$$
$$(1.2 VD \div 240 V \times 100) = 0.5 \% VD$$
$$\begin{aligned} & ((25,134 \text{ AFC} \times 1.10 \text{ UA}) + 0 \text{ MC}) = 27,647 \text{ AFC} \\ & (2 \times 25 \text{ L} \times 27,647 \text{ AFC}) \div (5,777 \text{ C} \times 1 \text{ N} \times 240 \text{ V}) = 0.997 \text{ CF} \\ & (1) \div (1 + 0.997 \text{ CF}) = 0.501 \text{ CM} \\ & (27,647 \text{ AFC} \times 0.501 \text{ CM}) = 13,851 \text{ CLC} \end{aligned}$$


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