This standard provides the requirements for underground pull cans with or without mechanical lugs for cable termination.

1. <u>Underground Service Pull Can without Mechanical Lugs</u>

SDG&E (Utility) accepts underground pull cans rated 0-600 volts, 0-400 amps maximum, without mechanical lugs for residential or commercial/industrial service provided the requirements of this standard are met. Pull cans are required to be wall-mounted.

- a. Pull cans shall be readily accessible and located in conformance with the requirements for electric meters. Refer to pages SG 504.1 504.5.
- b. Pull cans of this type are used to pull and splice connection of the Utility's service lateral conductors to customer-owned service entrance conductors. The service entrance conduit must exit from the top or within 2" of the top of the pull can. Customer shall provide enough wire to reach the bottom of the pull can.
- c. Pull cans without mechanical lugs may only be used when all of the following requirements are met:
 - i. Service equipment ampacity rating and the size of the customer's conductors do not exceed the values shown in Table 1.
 - ii. Not more than one conductor per phase and neutral of customer service entrance conductors are installed.
 - iii. The Utility's service lateral conductors do not exceed 1 run of 3/C or 4/C No. 500 kCMIL.

When all of the above conditions cannot be met, refer to pages SG 705.3 – 705.4 for a pull can with mechanical lugs.

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_			WITH OR WITHOUT MECHANICAL LUGS											

Underground Service Pull Can without Mechanical Lugs

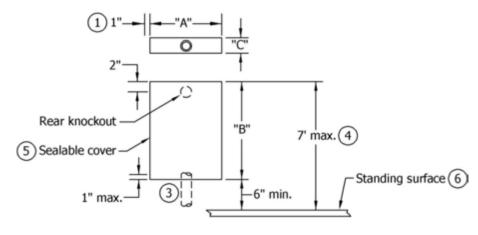


TABLE 1

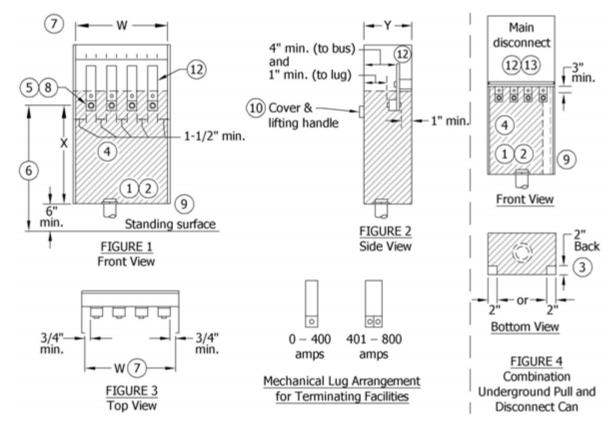
Type of	Custo	omer-Installed	Maximum Size for Customer-Installed	Minimum Pull Can Dimensions Residential or Commercia				
Service	Service Service Entrar Equipment Conductors M Ampacity Wire Size		Service Lateral Conduit 3W or 4W Service	"A"	"B"	"C"		
Commercial	0 – 100	#3/0	3" Single-Phase or Three-Phase	10"	12"	4"		
Residential	0 – 125	#3/0	Three-Phase 2	6"	18"	7		
Commercial	101 – 200	#250 kCMIL	3" Single-Phase or Three-Phase	12"	18"	6"		
Residential	126 – 225	#250 KCMIL	Three-Phase	12	10	O		
Commercial	201 – 400	#FOO LCMII	3" Single-Phase or	10"	24"	8″		
Residential	226 – 400	#500 kCMIL	4" Three-Phase	18"	24	Ö		

Notes:

- 1) 1" side clearance is required to any side wall, equipment or obstruction. Any projection which extends more than the depth of the pull can from the surface on which the pull can is mounted shall be considered an obstruction.
- (2) See page SG 309.3, Note C, for 3" conduit exception.
- 3 Service lateral conduit must be firmly secured to pull can with lock nut, hub or bushing and must enter the bottom of the pull can. Maximum conduit intrusion inside can is 1".
- 4 Exception to the 7' maximum mounting height may be granted due to special conditions. Consult with the Utility.
- (5) Pull can covers shall be removable and sealable. See page SG 503 for sealing requirements.
- (6) 3' x 3' clear and level working space required in front of pull can. See pages SG 504.4 504.5 for additional working space clearance requirements.

_	OF 4		UNDERGROUND PULL CAN WITH OR WITHOUT MECHANICAL LUGS										SG 70)5.2
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2. <u>Underground Service Pull Can With Mechanical Lugs</u>



The Utility accepts underground pull cans rated 0-600 volts, 0-800 amps maximum, with mechanical lugs for cable termination for residential or commercial/industrial service provided the requirements of this standard are met. Pull cans are required to be wall-mounted.

TABLE 2

	Minimum Pull Can Dimensions											
Convice Ampacity	"W"	Width	"X"	"Y"								
Service Ampacity	3W	4W	Lug	Depth								
0 - 200*	10"	14"	11"	6"								
201 – 400	10"	14"	22"	6"								
401 - 800	16"	22"	26"	11"								

^{* 225} amps for residential service equipment

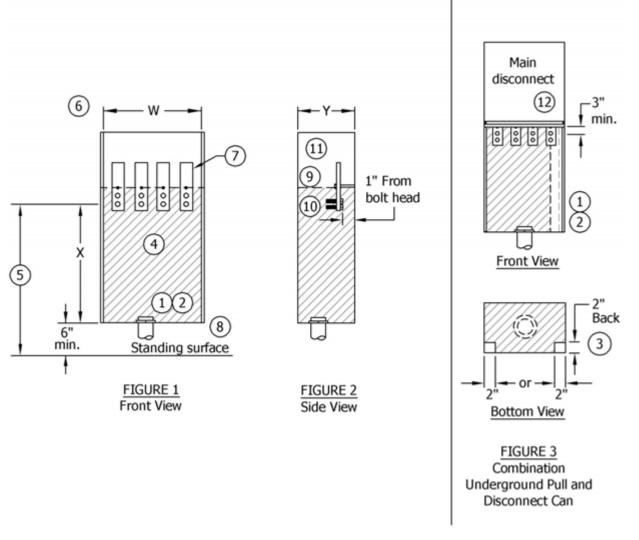
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Notes:

- (1) Service lateral conduits, firmly secured with a locknut, hub or bushing, must enter bottom of pull can. Maximum conduit intrusion inside pull can is 1''. Load conduits must exit above shaded area. See pages SG 309.1 309.3 for service lateral conduit requirements.
- 2 Bonding connection for service lateral conduits only is permitted at bottom of can. Any other bonding or grounding connection must be made above the shaded area and no grounding or bonding conductor is permitted to pass through shaded area.
- 3 In the combination underground pull and disconnect can (see Figure 4) the grounding electrode conductor or bond jumper may be installed in a fully enclosed, factory-installed wireway (2" x 2" maximum) located in either back corner of the pull can area (see Figure 4 Bottom View). The raceway may not impede the required working space or reduce any specific clearances.
- 4) Shaded area is for Utility service lateral conductor only. See Note 2 for exception.
- 5 Terminating facilities for Utility's service lateral conductors shall be aluminum-bodied mechanical lugs with a range accepting one No. 4 AWG through 500 kCMIL conductor. One lug shall be provided for terminations rated up to 400 amps and 2 lugs for terminations rated 401-800 amps. Refer to page SG 707.2 Note 3 for exception that allows a single lug for 600 ampere special application.
- 6 Maximum height from standing surface to centerline of mechanical lug is 60". Utility may approve greater height due to special circumstances. Consult with the Utility.
- 7 Dimension "W" is the minimum width of the pull can access opening and is measured between the left side and right side return flanges; not interior walls of pull can.
- 8 When viewed from front of pull can, return flanges shall not extend closer than 34" from the outside edge of mechanical lug.
- (9) 1" minimum side clearance is required from side of pull can to any other equipment or obstruction.
- (10) All pull cans shall have full front access. Cover panels shall be removable, sealable, provided with two lifting handles, and limited to a maximum of 9 square feet in area. Sealing provisions shall consist of two drilled stud and wing-nut assemblies on opposite sides of the panel. See page SG 503 for sealing requirements. A minimum of 4" is required from the bus to the inside of the panel cover and 1" minimum from the bolt termination to the inside of the panel cover.
- 11. See page SG 703 for conductor identification and phase arrangement.
- (12) In <u>pull cans rated 0 800 amps</u>, either bus bar or cable connections may be used from the top of the cable termination bus to serve a Current Transformer (CT) compartment, a single main disconnect, and multiple main disconnects.
- (13) A main service or meter service disconnect is not permitted on the supply (line) side of a single meter.

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_	OF 4		UNDERGROUND PULL CAN WITH OR WITHOUT MECHANICAL LUGS										SG 7	05.4			

This standard provides the requirements for underground pull cans with cable termination bus stubs. SDG&E (Utility) accepts underground pull cans rated 0-600 volts, 801-1,200 amps maximum, with cable termination bus stubs for residential or commercial/industrial service provided the requirements of this standard are met. Pull cans are required to be wall-mounted.



	Minimum Pull Can Dimensions											
Service	"W" W	/idth	"X"	"Υ"								
Ampacity	3W	4W	Lug	Depth								
801 – 1,200		30"	26"	11"								

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SHEET 1 OF 2

UNDERGROUND PULL CAN WITH CABLE TERMINATION BUS STUBS

SG 706.1

Notes:

- 1) Service lateral conduits, firmly secured with locknut, hub, or bushing, must enter bottom of pull can. Maximum conduit intrusion inside pull can is 1". Load conduits must exit above shaded area. See pages SG 309.1 309.3 for service lateral conduit requirements.
- 2 Bonding connection for <u>service lateral conduits only</u> is permitted at bottom of can. Any other bonding or grounding connection must be made above the shaded area and no grounding or bonding conductor is permitted to pass through the shaded area.
- 3 In the combination underground pull and disconnect can (see Figure 3) the grounding electrode conductor or bond jumper may be installed in a fully enclosed, factory-installed wireway (2" x 2" maximum) located in either back corner of the pull can area (see Figure 3, Bottom View). The raceway may not impede the required working space or reduce any specified clearances.
- 4) Shaded area is for Utility service lateral conductor only. See Note 2 for exception.
- 5 Maximum height from standing surface to centerline of lowest termination bolt is 60". Utility may approve greater height due to special circumstances. Consult with the Utility. 3' x 3' clear and level working space is required in front of the pull can. See pages SG 504.4 504.5 for additional working space clearance requirements.
- (6) Dimension "W" is the minimum width of the pull can access opening and is measured between the left side and right side return flanges; not the interior walls of the pull can.
- (7) When viewed from front of pull can, return flanges shall not extend past the outside edge of bus stub.
- (8) 1" minimum side clearance is required from side of pull can to any other equipment or obstruction.
- (9) All pull cans shall have full front access. Cover panels shall be removable, sealable, provided with two lifting handles, and limited to a maximum of 9 square feet in area. Sealing provisions shall consist of two drilled stud and wing-nut assemblies on opposite sides of the panel. See page SG 503 for sealing requirements. A minimum of 4" is required from the bus to the inside of the panel cover and 1" minimum from the bolt termination to the inside of the panel cover.
- 10) See page SG 703 for conductor identification and phase arrangement. See pages SG 709.1 709.3 for bus and bolt details.
- 11 In <u>pull cans rated 801 1,200 amps</u>, bus bar connections are required from the top of the cable termination bus stubs to serve a Current Transformer (CT) compartment. The reason for requiring bus bar connections is large cable will quite often pull the CT busses out of their vertical alignment, making it difficult or impossible to mount the CTs. Bus bars are not required to serve a main disconnect.
- (12) A main service or meter service disconnect is not permitted on the supply (line) side of a single meter.

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