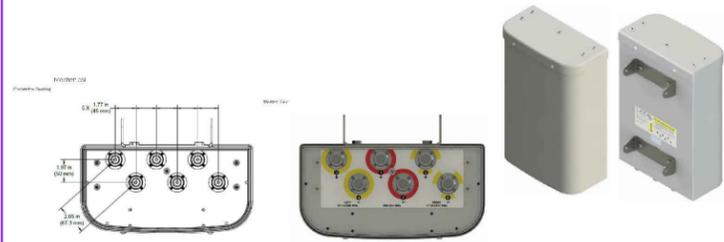


HPA-65F-BUU-H2



	2 x Low Band Ports which cover the full range from 600-800 MHz			4 x High Band Ports which cover the full range from 1700-2300 MHz		
Frequency Range	698-806 MHz	824-894 MHz	1850-1990 MHz	1710-1755/2110-2170 MHz	2305-2360 MHz	
Gain	10.0 dBi	10.5 dBi	12.8 dBi	12.6 dBi	13.6 dBi	14.0 dBi
Azimuth Beamwidth (-3dB)	65°	52°	64°	65°	60°	59°
Elevation Beamwidth (-3dB)	40.0°	35.8°	17.5°	17.8°	15.8°	14.3°
Electrical Down tilt	4°	4°	3°	3°	3°	3°
Elevation Sidelobes (1st Upper)	< -15 dB	< -13 dB	< -13 dB	< -17 dB	< -13 dB	< -17 dB
Front-to-back Ratio @180°	> 28 dB	> 28 dB	> 28 dB	> 30 dB	> 30 dB	> 30 dB
Cross-Polar Port-to-Port Isolation	> 20 dB	> 20 dB	> 23 dB	> 23 dB	> 23 dB	> 23 dB
Voltage Standing Wave Ratio (VSWR)	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (IM20dB)	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc
Input Power Continuous Wave (CW)	500 watts	500 watts	300 watts	300 watts	300 watts	300 watts
Polarization	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°
Input Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground

Mechanical

Dimensions (LxWxD) 21.4x14.4x7.3 in (544x366x185 mm)

Survival Wind Speed > 150 mph (≥ 241 kph)

Front Wind Load 66 lbs (293 N) @ 100 mph (161 kph)

Side Wind Load 34 lbs (150 N) @ 100 mph (161 kph)

Equivalent Flat Plate Area 2.6 ft² (0.24 m²)

Weight * 15.2 lbs (6.9 kg)

Connector 6 x 7-16 DIN female long neck

Mounting Pole 7 to 5 in (5 to 12 cm)

* Weight excludes mounting

4 SCALE N.T.S.

MBK-03

Mechanical

Weight 9.8 lbs (4.4 kg)

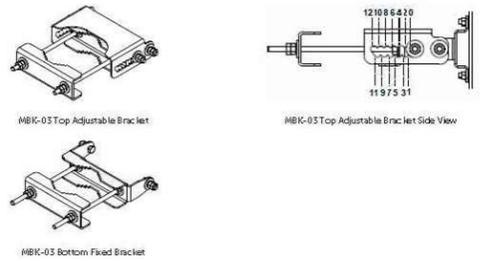
Hinge Rich 13 in (330 mm)

Mounting Pole Dimension 2 to 5 in (5 to 12 cm)

Fastener Size M10

Installation Torque 20 ft lbs (27 Nm)

Mechanical Tilt Adjustment 0° - 12°



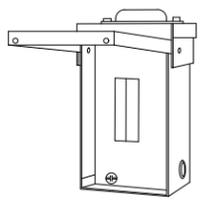
Parts & Accessories

Model number MBK-03

Overall Weight 9.8 lbs (4.4 kg)

5 SCALE N.T.S.

SQUARE D BY SCHNEIDER ELECTRIC LOAD CENTER, 70A (MODEL #QO24L70RB)



TECHNICAL CHARACTERISTICS

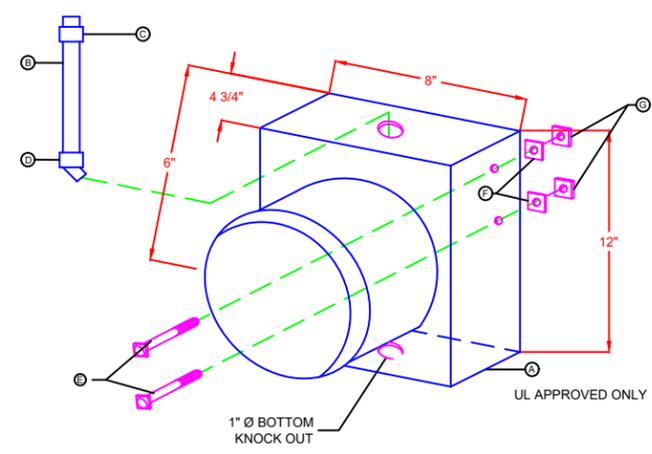
AMPERE RATING	70A
MAXIMUM SINGLE POLE CIRCUITS	4
WIDTH	4.88 INCHES
APPLICATION	DESIGNED TO MEET RESIDENTIAL, COMMERCIAL AND INDUSTRIAL REQUIREMENTS TO PROTECT ELECTRICAL SYSTEMS, EQUIPMENT AND PEOPLE.
SPACES	2
WIRE SIZE	#12 TO 3 AWG(AL) - #14 TO 4 AWG(CU)
MAXIMUM TANDEM CIRCUIT BREAKERS	2
VOLTAGE RATING	120/240VAC
WIRING CONFIGURATION	3-WIRE
PHASE	1-PHASE
DEPTH	4.00 INCHES
HEIGHT	9.38 INCHES
BUS MATERIAL	TIN PLATED ALUMINUM
COVER TYPE	SURFACE
CATALOG REFERENCE NUMBER	1100CT9901
ENCLOSURE TYPE	OUTDOOR/RAINPROOF
ENCLOSURE RATING	NEMA 3R
GROUNDING BAR	ORDER SEPARATELY
APPROVALS	UL LISTED
SHORT CIRCUIT CURRENT RATING	10KA
MAIN TYPE	FIXED - FACTORY INSTALLED MAIN LUGS

SHIPPING AND ORDERING

CATEGORY	00101 - LOAD CENTERS, 1 PHASE, NEMA1 & 3R, 2 - 8 CIRCUIT, TYPE QO
DISCOUNT SCHEDULE	3A
ARTICLE NUMBER	785901785132
PACKAGE QUANTITY	1
WEIGHT	5 LBS.
AVAILABILITY CODE	S
RETURNABILITY	Y

6 SCALE N.T.S.

POWER METER



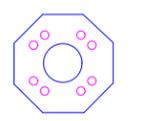
NOTES:
1. TOP KNOCK OUT WITH LIQUID FLEX 45° AND STRAIGHT CONNECTORS AVAILABLE TO POWER UTILITY CREW CONNECTION.
2. BOTTOM KNOCK OUT FOR CONNECTING TO CUSTOMER FUSE DISCONNECT BOX.
3. HEIGHT MAY BE DETERMINED BY POWER UTILITY.

PARTS LIST

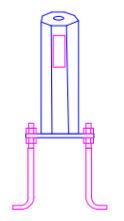
CALLOUT	QTY	DESCRIPTION	CALLOUT	QTY	DESC.
A	1	METER CABINET WTR PART # 2 POLE 120/140 SINGLE PHASE			
B	1	4" X 1" Ø LIQUID TIGHT METALLIC FLEX CONDUIT			
C	1	1" Ø LIQUID TIGHT CONNECTOR STR POINT			
D	1	1" Ø LIQUID TIGHT CONNECTOR-45°			
E	2	5/16" X 1" BOLT - STAINLESS STEEL			
F	2	5/16" LOCK WASHER - STAINLESS STEEL			
G	2	5/16" NUT - STAINLESS STEEL			

7 SCALE N.T.S.

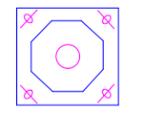
NEW CONCRETE POLE DETAIL



SHAFT CROSS SECTION DETAIL



ELEVATION SEE RECOMMENDED "CAPPING DETAILS"



SLOTTED BASE PLATE

CATALOG NUMBER	POLE HEIGHT "A"	BASE O.D.	ANCHOR BOLT	BOLT CIRCLE	BASE PLATE (SQ)	ULTIMATE G.L. MOMENT (FT. LBS.)	WEIGHT (LBS.)	MAXIMUM EPA / MPH (SQ. FT.)		
								80	90	100
1C1-16	16' 3"	7 -3/4"	1" X 36" X 4"	12 -1/2"	12"	17,000	560	14.0	10.0	7.5
1C1-17	17' 9"	7 -7/8"	1" X 36" X 4"	12 -1/2"	12"	18,400	530	14.0	10.0	7.5
1C1-19	19' 6"	8"	1" X 36" X 4"	12 -1/2"	12"	20,000	720	13.0	9.0	7.0
1C1-20	20' 9"	8 - 1/4"	1" X 36" X 4"	12 -1/2"	12"	21,200	800	13.0	9.0	7.0
1C1-23	23' 3"	8 -3/8"	1" X 36" X 4"	12 -1/2"	12"	22,200	940	13.0	9.0	6.0
1C1-25	25' 9"	8 -3/4"	1" X 36" X 4"	12 -1/2"	12"	25,400	1,030	12.5	8.5	5.5
1C1-28	28' 3"	9"	1" X 36" X 4"	12 -1/2"	12"	27,400	1,240	10.5	6.5	3.5
1C1-29	29' 3"	9 -1/8"	1" X 36" X 4"	12 -1/2"	12"	28,100	1,290	10.0	6.5	3.0
1C1-40	40' 3"	10 -1/4"	1 -1/4" X 44" X 4"	14"	14"	38,200	2,090	5.0	1.0	-



8 SCALE N.T.S.

ASG55

PHASE II
CROWN CASTLE PROJECT NO.
242727

CLIENT:

300 SPECTRUM CENTER DR STE. 1200
IRVINE, CA 92618
www.crowncastle.com

PREPARED BY:

5841 EDISON PLACE, SUITE 200
CARLSBAD, CA 92008
PHONE: (760) 929-0910
FAX: (760) 929-0936

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REVISION / ISSUE	DATE

SITE NAME & ADDRESS:

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30001 VIA RIVERA
RANCHO PALOS VERDES, CA

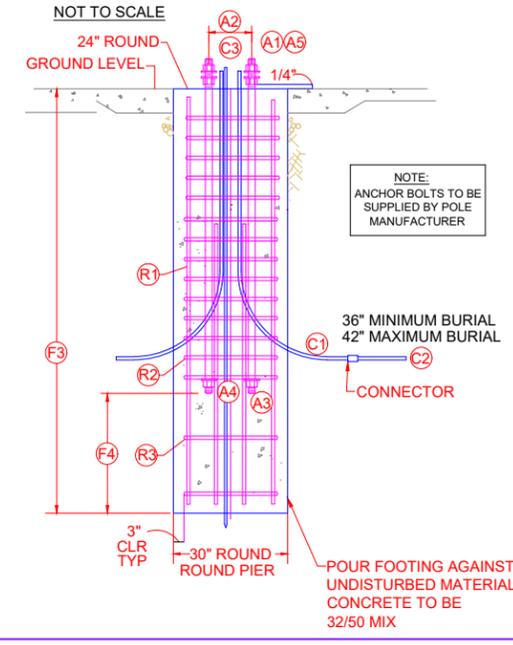
DETAILS & NOTES

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SHEET NO.
D-3

GROUND ROD:
 G1 GROUND ROD SHALL BE MINIMUM 0.625" DIA. x 9' LONG, COPPER CLAD.
 G2 MINIMUM 3" EXPOSURE AT TOP OF FOUNDATION WITHIN BOLT CIRCLE.

NEW POLE FOUNDATION



- ANCHOR BOLTS:**
- A1 ANCHOR BOLTS SHALL BE 4-1" DIAMETER, AS GIVEN IN SPECIFICATIONS ASTM A449.
 - A2 BOLT CIRCLE DIAMETER TO MATCH POLE BASEPLATE.
 - A3 ANCHOR BOLTS SHALL HAVE HEADS, OR NUTS WITH THE THREADS STAKED AT TWO PLACES BELOW THE NUT, EMBEDDED IN FOUNDATION.
 - A4 ANCHOR BOLTS SHALL BE EMBEDDED 33" MINIMUM, BELOW STREET GRADE (63" EMBEDMENT IN CONCRETE).
 - A5 BOLT PROJECTION AS RECOMMENDED BY THE MANUFACTURER.
- CONDUIT:**
- C1 CONDUIT SHALL BE RIGID STEEL, GALVANIZED, INSIDE THE FOUNDATION, WITH 6" MINIMUM STUB-OUT.
 - C2 SERVICE AND FEED CONDUITS SHALL BE RGS OR SCH 80 PVC, AS REQUIRED.
 - C3 STUB UP TO WITHIN 4" FROM HAND HOLE.
- REINFORCEMENT:**
- R1 VERTICAL REBAR SHALL BE (7) #6 EQUALLY SPACED INSIDE OF HOOPS.
 - R2 HOOPS SHALL BE #4 X 18" I.D., SPACED 4" O/C FROM TOP OF FOUNDATION TO END OF ANCHOR BOLTS.
 - R3 HOOPS SHALL BE #4 X 18" I.D., SPACED 12" MIN. FROM THE ANCHOR BOLTS TO BOTTOM OF FOUNDATION.
 - R4 ALL REBAR SHALL HAVE 3" MINIMUM COVERING.
- F3 5' DEPTH
 - F4 2' DEPTH

9	SCALE
	N.T.S.

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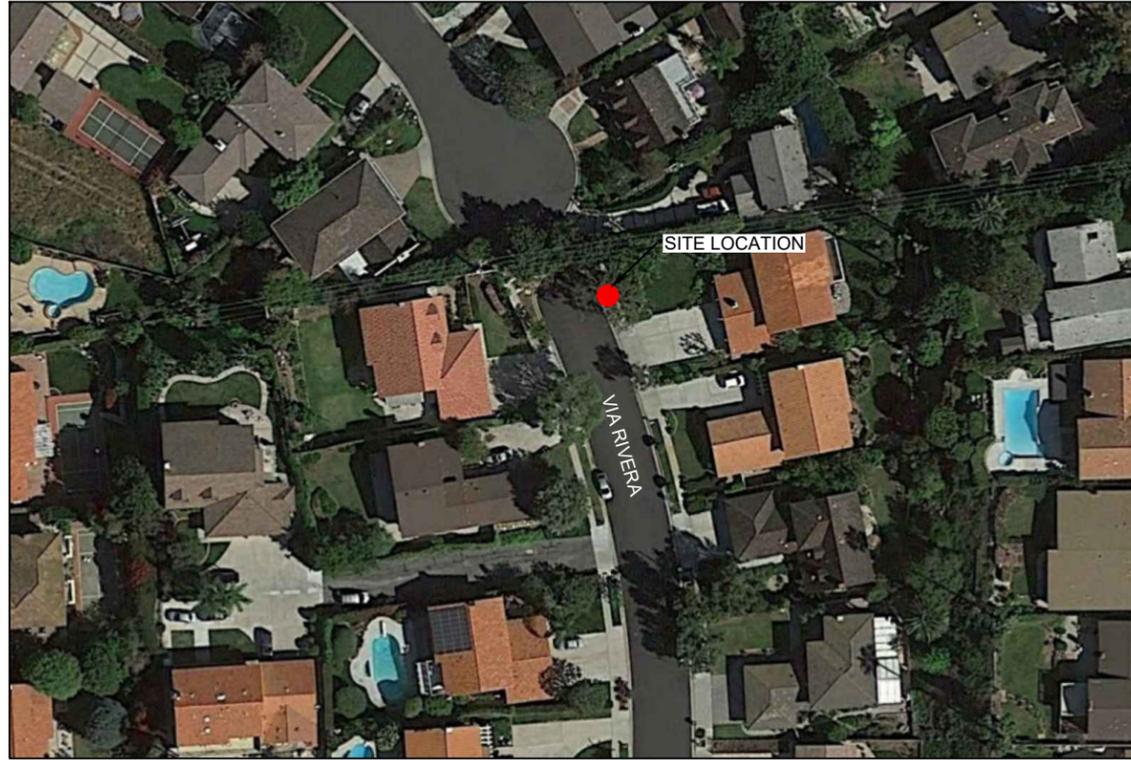
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DETAILS & NOTES

DRAWN BY: FB	DRAFT DATE: 11/02/16	APPROVED BY: TT
SHEET NO. D-4		



A KEY MAP



B 12 O'CLOCK VIEW- FROM THE WEST



C 3 O'CLOCK VIEW- FROM THE NORTH



D 9 O'CLOCK VIEW- FROM THE SOUTH

ASG55

PHASE II
CROWN CASTLE PROJECT NO.
242727

CLIENT:
CROWN CASTLE
NG WEST LLC
300 SPECTRUM CENTER DR STE. 1200
IRVINE, CA 92618
www.crowncastle.com

PREPARED BY:
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Telecommunications Engineering
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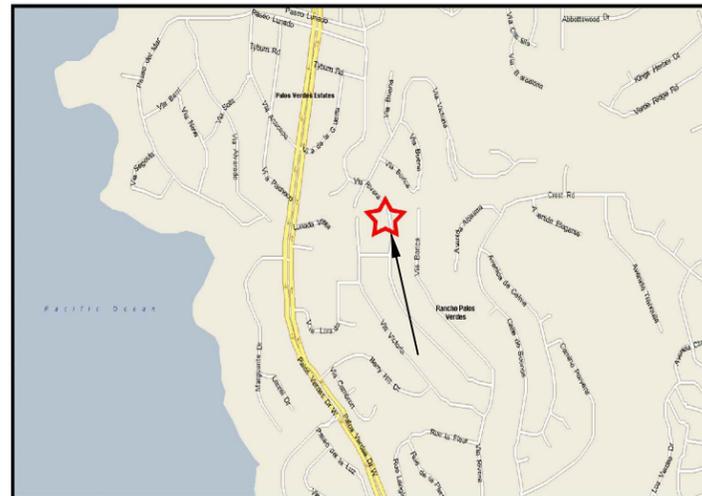
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RANCHO PALOS VERDES, CA

SITE PHOTOS

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Existing Site



Vicinity Map
LOOKING NORTHWEST



Proposed Site ASG55

ASG55

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NG WEST LLC
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