



ETATRACK active 2500-6

Single-axis Tracking System for Schüco Modules

Main Features

- total module surface up to c. 26 m²
- suitable for the following module types:
 - Schüco MS05 or PS09
- no failure-prone light sensor
- no unnecessary tracking movements
- low power consumption (c. 2 kWh/year)
- statics according to German and European standards
- high reliability and life-expectancy
- maintenance-free
- cost-efficient tracking system
- no AC Power required
- enphase D380 Ready

Application

- single-axis tracking system for PV module types Schüco MS05 or PS09
- additional energy yield of up to 40% compared to fixed installations

Design

Tracking Unit

- single-axis tracking system
- angle of second axis 30°, other angles on request
- elevation East-West: 90°
- module surface up to c. 26 m²
- frame and pole: steel, hot-dip Zn-coated
- screw set: steel, Zn-coated
- module fixation with stainless steel clips
- suitable for high wind speeds: statics according to German and European standards
- low energy consumption c. 2kWh/year
- maintenance-free

Control

- electronics incl. battery in weatherproof housing
- supply voltage: 12 VDC (nominal voltage) up to 50 Voc (open-circuit voltage), by one of the tracked modules**
- stepwise tracking, depending on the daily sunshine duration (length of day)
- South position in darkness
- synchronisation of multiple units possible
- standby mode in periods of low irradiation***

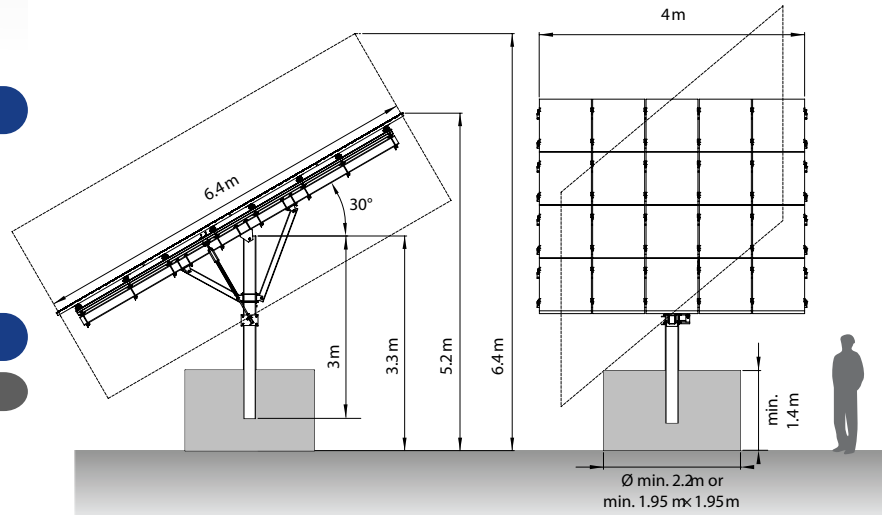
BERNT LORENTZ GmbH & Co. KG

Errors excepted and possible alterations without prior notice.

* for framed PV modules according to IEC 61215, UL 1703 ** for safe operation in specific system designs, an additional small module might be necessary, cf. installation manual



Ontario Domestic Compliance 2011



Example: system dimensions with 20 PV modules 1,593 mm x 790 mm

Drive

- DC linear drive
- maintenance-free
- optional: stainless steel rod end bearings

Foundation

- Ontario Engineered Foundation System (design on reverse page)
- additional engineered mounting solutions ready - Drill Mount and Pre-Cast

Storage and Operating Conditions

- ambient temperature range: -30°C to +50°C
- daily average ambient humidity: max. 80%
- air salinity: max. 2µg/m³, or distance from coast: min. 1 km
- altitude: -400 m to +3,000 m MSL
- detailed description of ambient conditions for safe operation, cf. installation manual
- designs for other conditions on request

Included in Delivery

- kit tracking unit
- control
- drive
- stainless steel mounting clamps (J-clips) with M8 nuts for module fixation, 48 sets per tracking unit for up to 20 PV modules
- installation manual
- not included in delivery: module clamps (middle and end) with M8 screw set

Accessories

- stainless steel screw set
- Enphase D380 Installation hardware

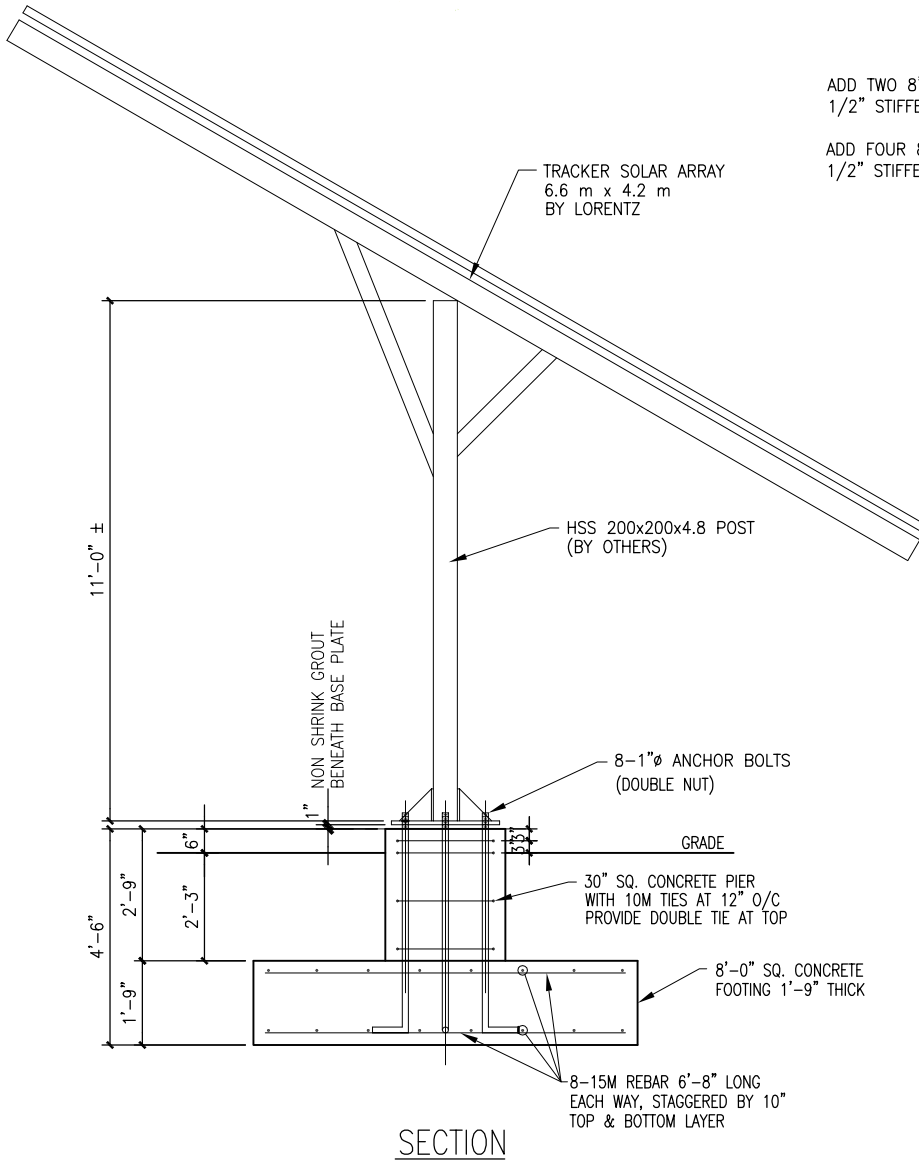
Also Available

- Pre-Engineered, ESA Approved BOS

View Live Installations Online

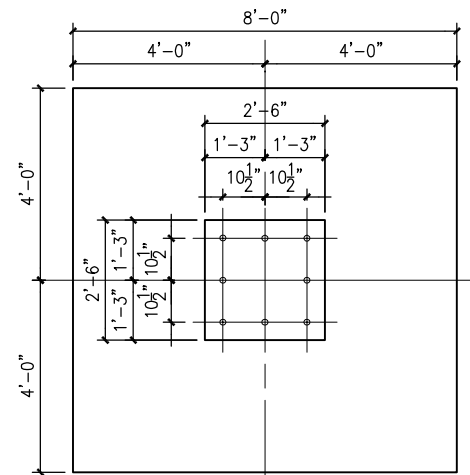
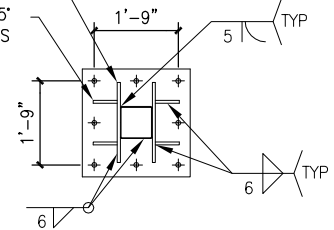
<http://www.strathconasolar.com/photo-gallery/>

*** for safe operation, cf. installation manual



ADD TWO 8" HIGH x 24"
1/2" STIFFENER PLATES

ADD FOUR 8" HIGH, 45"
1/2" STIFFENER PLATES

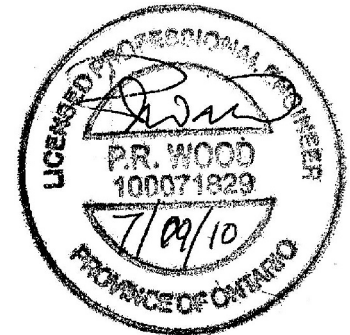
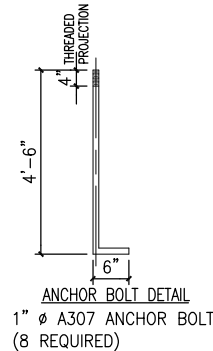


GENERAL NOTES

1. CONCRETE IS SPECIFIED USING CSA A23.1 AS FOLLOWS:

PARAMETER	EXTERIOR CONCRETE
EXPOSED CLASS (TABLE 1)	F-2
AIR CONTENT (TABLE 4)	2
MAX. W/C RATIO (TABLE 2)	0.55
CURING TYPE	1
MIN. COMPRESSIVE STRENGTH @ 28 DAYS	30 MPa

- FABRICATION AND PLACING OF REBAR TO BE IN ACCORDANCE WITH CSA A23.1 AND THE REINFORCING STEEL INSTITUTE OF CANADA'S 'REINFORCING STEEL MANUAL OF STANDARD PRACTICE'.
- REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO CSA G30.18 M92, $F_y=400$ MPa
- CONCRETE SHALL NOT BE POURED UNTIL REBAR HAS BEEN INSPECTED.
- CONCRETE COVER FOR REINFORCING STEEL SHALL BE 40 mm AS PER TABLE 17 OF CSA 23.1
- ALL REINFORCING BARS SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BY CONCRETE, ADDITIONAL BARS, STIRRUPS, TIES OR APPROVED CHAIRS AGAINST DISPLACEMENT
- FOUNDATION IS SUITABLE FOR SOILS WITH A BEARING CAPACITY OF 2000 PSF (100 kPa) OR BETTER. SHOULD UNUSUALLY SOFT SOILS BE ENCOUNTERED, CONTACT THE ENGINEER
- FOUNDATION SHALL BE CONSTRUCTED OR PLACED ON UNDISTURBED SOIL WITH ADEQUATE BEARING CAPACITY.
- THESE PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. DESIGN CRITERIA: $I=1.0$, $q=0.6$ (1 IN 50).



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PROJECT:

TRACKER SOLAR ARRAY FOUNDATION
FOR TYPICAL INSTALLATIONS IN
THE PROVINCE OF ONTARIO

DATE:

OCT. 15, 2010

DRAWN:

PRW

DESIGNED:

PRW

TITLE:

FOUNDATION DETAIL

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K10016-9

DRAWING No.:

F1