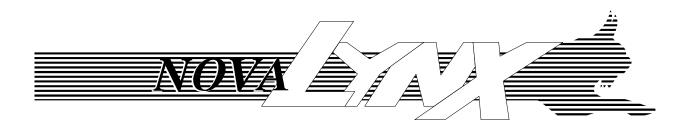
# **NOVALYNX CORPORATION**

### MODEL 255-200 EVAPORATION PAN

**INSTRUCTION MANUAL** 



**REVISION DATE: 04/06/2007** 

# **Receiving and Unpacking**

Carefully unpack all components and compare to the packing list. Notify NovaLynx Corporation immediately concerning any discrepancy. Inspect equipment to detect any damage that may have occurred during shipment. In the event of damage, any claim for loss must be filed immediately with the carrier by the consignee. Damages to equipment sent via Parcel Post or UPS require the consignee to contact NovaLynx Corporation for instructions.

### Returns

If equipment is to be returned to the factory for any reason, call NovaLynx between 8:00 a.m. and 4:00 p.m. Pacific Time to request a Return Authorization Number (RA#). Include with the returned equipment a description of the problem and the name, address, and daytime phone number of the sender. Carefully pack the equipment to prevent damage or additional damage during the return shipment. Call NovaLynx for packing instructions in the case of delicate or sensitive items. If packing facilities are not available take the equipment to the nearest Post Office, UPS, or other freight service and obtain assistance with the packaging. Please write the RA# on the outside of the box.

### Warranty

NovaLynx Corporation warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from the date of shipment from the factory. NovaLynx Corporation's obligations under this warranty are limited to, at NovaLynx's option: (i) replacing; or (ii) repairing; any product determined to be defective. In no case shall NovaLynx Corporation's liability exceed product's original purchase price. This warranty does not apply to any equipment that has been repaired or altered, except by NovaLynx Corporation, or that has been subjected to misuse, negligence, or accident. It is expressly agreed that this warranty will be in lieu of all warranties of fitness and in lieu of the warranty of merchantability.

### Address

NovaLynx Corporation 4055 Grass Valley Highway, Suite 102 Auburn, CA 95602 Phone: (530) 823-7185 Fax: (530) 823-8997 Email: nova@novalynx.com Website: www.novalynx.com

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### NovaLynx Corporation

#### Model 255-200 Evaporation Pan Instruction Manual

#### **1.0 INTRODUCTION**

The Model 255-200 Evaporation pan is a standard National Weather Service Class A type for evaporation measurement. It is usually installed on a wooden platform set on the ground in a grassy location. The pan is filled with water and exposed to represent an open body of water. The pan is filled to within 2.5 inches of the top. The evaporation rate then is measured by manual readings or with an analog output evaporation gauge.

#### 1.1 Specifications

Material: Low carbon stainless steel, type 304, 18 gauge
Construction: Heliarc welded, 1/2" drain plug, NPT female coupling
Size: Cylindrical, inside dimensions 10" deep x 47-1/2" dia, wall thickness 0.047"
Volume: Approx 77 gallons (adding 7.7 gallons will raise water level in pan by 1")
Weight/shipping: 48 lbs/59 lbs

#### **2.0 SITING GUIDELINES**

The site for the equipment should be level, sodded, and free from obstructions. It should be representative of the principal natural agricultural soils and vegetation conditions of the area. At locations where the normal climate and soil do not permit the maintenance of a sod cover, the ground cover should be maintained as near as possible to the natural cover common to the area. Under no conditions should the evaporation pan or the instrument shelter be placed on concrete, asphalt, or over a layer of crushed rock. Obstructions such as shrubs, trees, or buildings should not be closer than four times the height of the object above the pan. Weeds and grass should be mowed to keep them below the level of the pan. The exposure should be free from obstructions that cast shadows over the pan during any part of the day other than brief periods near sunrise and sunset. Avoid locations near ponds, swamps of not more than a few miles in diameter (particularly if they are temporary in nature), lawns or other areas that receive frequent sprinkling or irrigation. At reservoirs (flood control, water supply, irrigation project), a site on the upwind side of the lake or reservoir is preferable. based on the prevailing direction of the strongest winds. Locate the equipment a sufficient distance from spillways and other bodies of water to minimize chances for water to be blown into the pan by strong winds. The site should be surrounded by a fence to protect the equipment and to prevent animals from drinking the water. A steel link fence, 9 or 11 gauge, a minimum of 4' high, with steel posts set in concrete, is suggested. If the area has problems with small animals or rodents, it may be necessary to bury a barrier and place 18" to 24" of chicken wire (galvanized) along the bottom of the fence.

#### **3.0 INSTALLATION AND MAINTENANCE**

The ground should be filled sufficiently to level the pan support and to keep the pan above the level of surface water in rainy weather. Earth fill should be used around the support to anchor it. It should be tamped firmly between the top members to within 1/2" of the top of the support, leaving an air space between the bottom of the pan and the fill to facilitate inspection of the pan for leaks. The pan should be centered on the platform. During inspections the platform level should be checked and corrected if needed.

When a micrometer hook gauge is used for measuring water levels, two short lines painted on the inside of the pan, 2" and 3" below the rim, will assist in maintaining the proper water level.

Because the temperature characteristics of all evaporation pans must be identical, they must not be painted. Clean the pan as frequently as necessary to keep it free from sediment, algae, and oil films. Any of these contaminants will materially affect the rate of evaporation.

The growth of algae can be discouraged by adding a small amount (5-10mg/liter) of copper sulfate to the water. A standard Class A pan filled to 8 inches would require about 1/2 teaspoon of copper sulfate crystals. If algae is already present, it must be removed first by thoroughly cleaning the pan.

Inspect the pan carefully for leaks at least once a month. Report the finding of any leaks on the observation form for the month. Report both the date the leak was discovered and the date the pan was repaired or replaced.

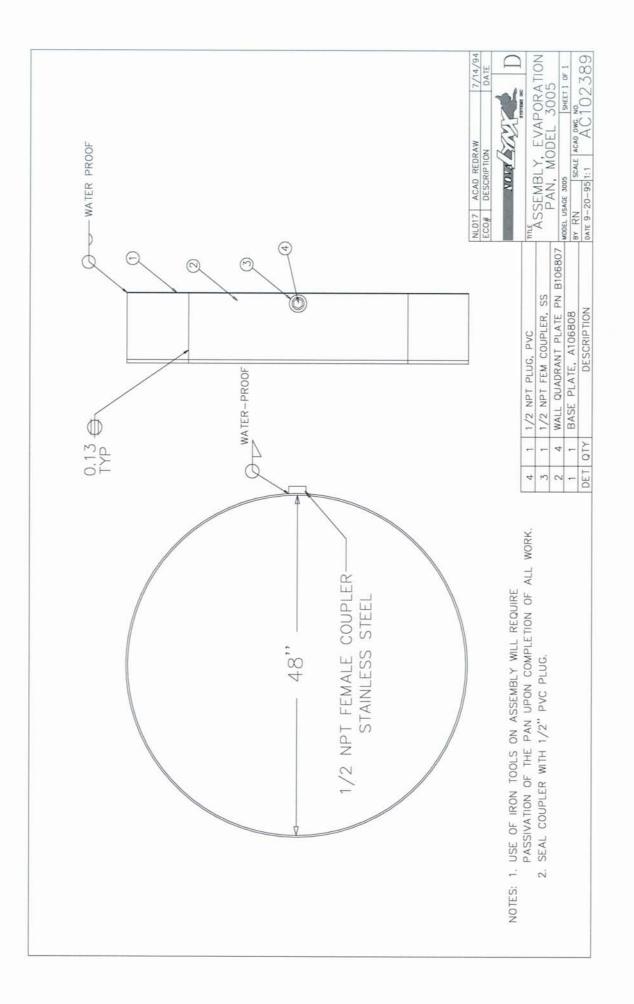
The pan should be emptied by siphoning or dipping the water out. Under no circumstances should the pan be lifted and emptied if any significant amount of liquid remains in the pan.

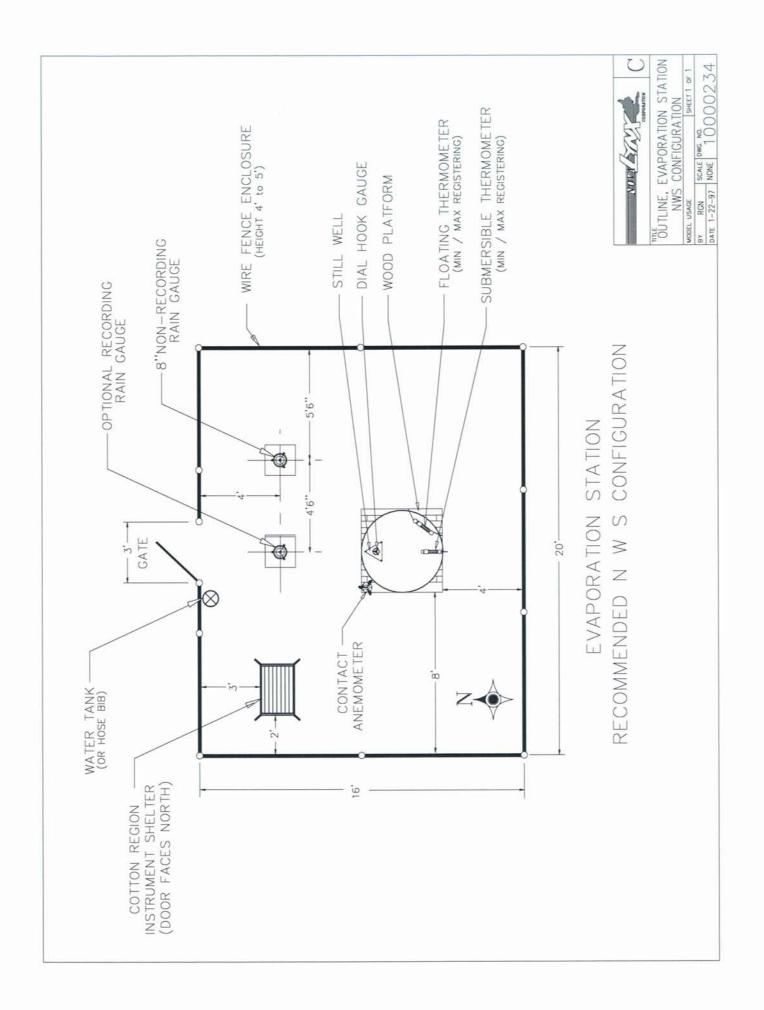
During months when freezing is likely, empty, clean, and store the pan. The pan should be stored indoors, if possible. If it is left in the fenced enclosure, it should be turned upside down and secured to the platform.

Where it is necessary to transport water some distance, a tank or other covered receptacle should be located near the site. A tank having a capacity of at least 30 gallons usually provides an adequate reserve of water. The storage tank should be thoroughly cleaned at the beginning of each season. The water placed in the tank should be completely free of oil. At the end of the season, the tank should be emptied and secured to prevent freeze and wind damage.

#### 4.0 DRAWINGS

AC102389	Assembly, Evaporation Pan
10000234	Outline, Evaporation Station, NWS Configuration
Fig 2.4	Construction-Data, Evaporation Pan Support





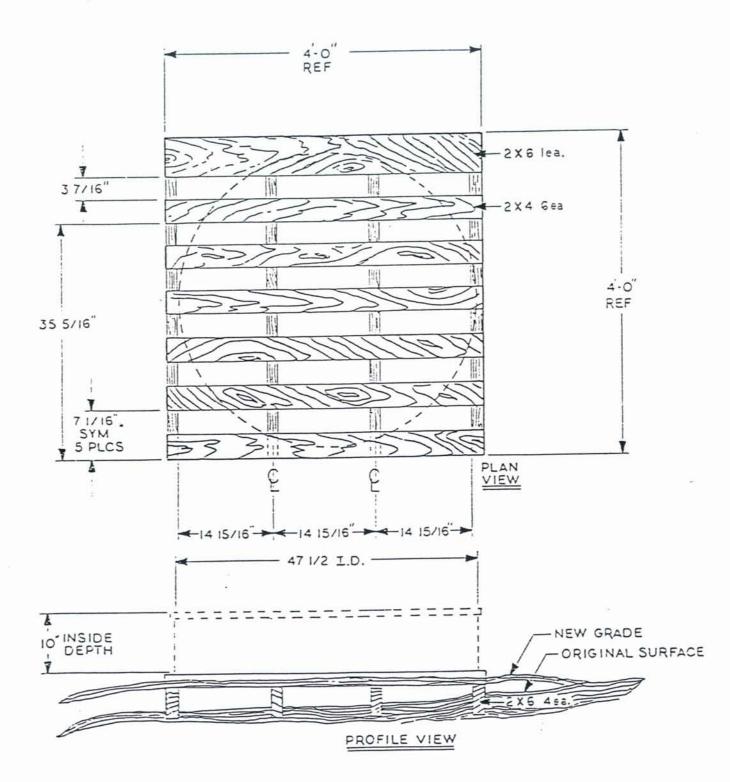


FIG 2.4 CONSTRUCTION-DATA EVAPORATION PAN SUPPORT

1.00