

# HAVE ZONING CODES GOT YOU RUNNING FOR COVER?



When building codes or design guidelines call for concealment of unsightly rooftop equipment, a Spinnaker Rooftop Screening System can provide a quick and easy solution, hiding the equipment while maintaining easy access.

Quality rooftop screening and design need not be costly. Spinnaker's innovative systems have been developed with your budget in mind.



# RUNNING FOR COVER



Quality rooftop screening and design need not be costly.

Spinnaker's innovative systems have been developed with your budget in mind.

A

Spinnaker screening system is easily installed, requiring no complicated assembly or rooftop penetration, guaranteeing an attractive custom appearance at less than a custom cost. Ideally suited for both Commercial or Industrial Applications

Simple, sturdy and attractive, a Spinnaker screening system provides a cost-effective method of protecting essential equipment while remaining in compliance with local building codes.

# WHATEVER YOUR ROOFTOP UNIT, A SPINNAKER SCREENING SYSTEM PROVIDES:

- Sliding panel designs, louvered or cladding style
- · Expansion possibilities
- Safe and easy service access
- Attractive custom appearance
- Additional accommodation for exhaust flues, economizers, etc.

#### AFFORDABLE AND ATTRACTIVE

- · High quality materials
- Standard colors: White, Dark Brown, Cream, Bone White or Gray
- · Optional custom color matching available

#### **ROOFTOP SCREENING WAS NEVER EASIER**

- · Attractive design
- Easy, lightweight installation
- Choice of style and colors
- Flexible, strong and durable materials
- Economical and affordable

For a well-defined, attractive, rooftop profile, plus all-weather protection for costly equipment, you can trust an affordable Spinnaker Rooftop Screening System.

THE CHOICE OF CONTRACTORS, ENGINEERS AND BUILDING DESIGNERS. EACH SPINNAKER SCREENING SYSTEM OFFERS EASY INSTALLATION AND PROTECTION WITHOUT ROOFTOP PENETRATION.

27 Leading Road, Etobicoke, Ontario, M9V 4B7 Canada 4846 Jennings Lane, Louisville, Kentucky, 40218, USA

> Toll Free: 800–932–6210 Toll Free Fax: 800–903–7294





# Corrugated Sliding Panel Architectural Screening Specification

The successful bidder shall supply "Corrugated Sliding Panel" style architectural screening as manufactured by Spinnaker Industries Inc. (www.spinnakerindustries.com)

The screening will be shipped "knocked-down" as an assembly KIT which will mount directly to the mechanical equipment (no roof-top penetration will be required, or allowed), and NO field modifications will be necessary when the kit arrives on-site (i.e. – trimming, sizing, cutting, etc.).

The kit will include extruded aluminum tracks (min. thickness .050,18 gauge), galvanized steel out-riggers (min. thickness .062, 16 gauge), painted corrugated panels (min. thickness .030, 22 gauge) that will allow for service access when mounted, and the necessary mounting hardware.

The paint shall be a powder polyester with a baked-on finish that meets ASTM B -117- 85 standard for 500 hour salt spray, ASTM D -3363 -74 standard for H-2H pencil hardness, and ASTM D -3359-83 for adhesion. Successful contractor to provide a sample color paint chip, as specified by architect, to ensure as accurate a color match as possible (Paint manufacturers numbers will NOT be acceptable – only paint chip samples).

The architectural screening system shall be designed and approved for "wind loading" and "seismic forces" as Per the following codes: FBC, OBC 2006 & UBC including Notice #2, Feb. 12th, 2002; and Exposure "D" was used as reference or lateral forces due to wind and seismic zone #4.

Successful bidder to provide: make, model number, and final approval drawings of roof-top mechanical equipment, along with any/all related accessories, to the manufacturer prior to production.



# Sliding Louvered Panel Architectural Screening Specification

The successful bidder shall supply "Sliding Louvered Panel" style architectural screening as manufactured by Spinnaker Industries Inc. ( www.spinnakerindustries.com )

The screening will be shipped "knocked-down" as an assembly KIT which will mount directly to the mechanical equipment (no roof-top penetration will be required, or allowed), and NO field modifications will be necessary when the kit arrives on-site (i.e. – trimming, sizing, cutting, etc.).

The kit will include extruded aluminum tracks (min. thickness .050,18 gauge), galvanized steel out-riggers (min. thickness .062, 16 gauge), painted satin coat louvered panels (min. thickness .030, 22 gauge) that will allow for service access when mounted.

The paint shall be a powder polyester with a baked-on finish that meets ASTM B -117- 85 standard for 500 hour salt spray, ASTM D -3363 -74 standard for H-2H pencil hardness, and ASTM D -3359-83 for adhesion. Successful contractor to provide a sample color paint chip, as specified by architect, to ensure as accurate a color match as possible (Paint manufacturers numbers will NOT be acceptable – only paint chip samples).

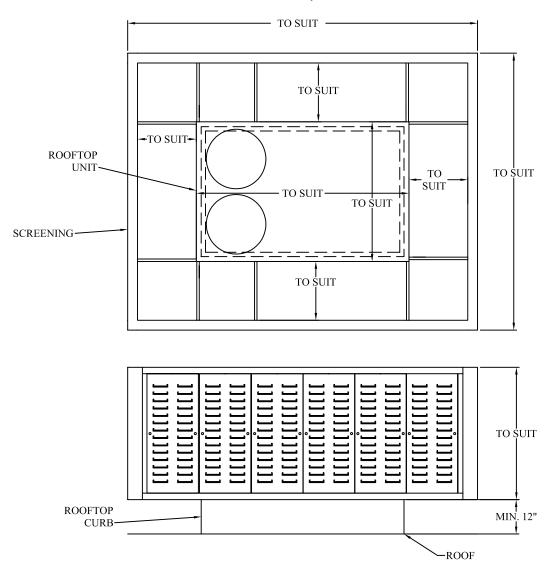
The architectural screening system shall be designed and approved for "wind loading" and "seismic forces" as Per the following codes: FBC & UBC, including Notice #2, Feb. 12th, 2002; and Exposure "D" was used as reference or lateral forces due to wind and seismic zone #4.

Successful bidder to provide: make, model number, and final approval drawings of roof-top mechanical equipment, along with any/all related accessories, to the manufacturer prior to production.



## "LOUVERED" OR "CORRUGATED" SLIDING PANEL

# ARCHITECTUAL SCREENING SPECIFICATION (LOUVERED STYLE SHOWN)



- The successful bidder shall supply "Louvered" or "Corrugated" sliding panel style architectural screening. The screening will mount directly to the mechanical equipment (no roof-top penetration will be required, or allowed).
- The kit will include extruded aluminum tracks (min. thickness 0.050, 18 gauge), galvanized steel out-riggers (min. thickness 0.062, 16 gauge), painted corrugated panels (min. thickness 0.030, 22 gauge) that will allow for service access when mounted, and the necessary mounting hardware.
- The paint shall be a powder polyester with a baked-on finish that meets ASTM B-117-85 standard for 500 hour salt spray, ASTM D-3363 -74 standard for H-2H pencil hardness, and ASTM D-3359-83 for adhesion.
- The architectural screening system shall be designed and approved for "wind loading" and "seismic forces" as per the following codes: FBC, OBC 2006 & UBC including Notice #2, Feb. 12th, 2002; and Exposure "D" was used as reference or lateral forces due to wind and seismic zone #4.
- Successful contractor to provide a sample color paint chip, as specified by architect, to ensure as accurate a color match as possible (Paint manufacturers numbers will NOT be acceptable - only paint chip samples).
- · Successful bidder to provide: make, model number, and final approval drawings of roof-top mechanical equipment, along with any/all related accessories, to the manufacturer prior to production.

5000174 APRIL 22, 2009

27 Leading Road Etobicoke, Ontario, Canada M9V 4B7 Tel: (416) 742-0598 Fax: (416) 742-4251

4846 Jennings Lane, Louisville, Kentucky, USA 40218 Tel: 1-800-932-6210 Fax: 1-800-903-7294

### Butech Inc.

3055 Runcorn Row Mississauga, Ontario L5N 4S6 Tel: 905-824-3098 Fax: 905-824-0552

### Engineering Review consisting of Wind/seismic forces for Spinnaker Screening Systems

Date: September, 2003

Company: Spinnaker Industries

27 Leading Road

Etobicoke, ON. M9V 4B7

Tel: (416) 742-0598 Fax: (416) 742-4251

Attention: Mr. Gord McCarthy

Subject: Screening Systems for curb installed HVAC units

#### **Engineering Review**

Engineering reviews consisting of wind loading and seismic forces of Spinnaker Screening Systems, installed on a range of HVAC units, was conducted.

Codes and references used for analysis were:- FBC & UBC, including Notice #2, Feb 12, 2002. Exposure "D" for lateral forces due to wind and seismic zone #4 were used as reference.

#### Analysis

Review included the following:

- A) Wind force calculations for units installed directly on roof curb, which include:
  - i) Horizontal wind force calculations
  - ii) Vertical wind force calculations
  - iii) Overturning moment calculations
  - iv) Calculation of resultant vertical forces on "windward sides" of units.
- B) Seismic force calculations for units installed directly on roof curb, which include:
  - i) Unit overturning moment calculations
  - ii) Unit stabilizing moment calculations
  - iii) Anchoring system requirements, based on wind and seismic forces.

Results from the above analysis indicate that the Spinnaker Screening Systems to HVAC units conform to the above codes and references.

Review Engineer: Rudy Buchanan (P.Eng) Butech Inc Mississauga, ON

#### Engineering Review (Compliance)

Date:

August 26, 2008

Company:

Spinnaker Industries

27 Leading Road

Etobicoke, ON. M9V 4B7 Tel: (416) 742-0598 Fax: (416) 742-4251

Attention: Mr. Gord McCarthy

Dear Gord.

Further to the request for confirmation of Codes used for the "Engineering Review" on Wind & Seismic forces for the Spinnaker Screening Systems, in the report dated September, 2003.

In addition to the FBC & UBC codes used, the following Ontario Codes were used for calculations.

OBC Code Part 4 – "Structural Design Section 4.1.8 – Live loads due to Winds Section 4.1.9 – Live loads due to Earthquakes.

#### Note

All calculations and Engineering reviews are Compliant with the latest "OBC" Codes and standards.

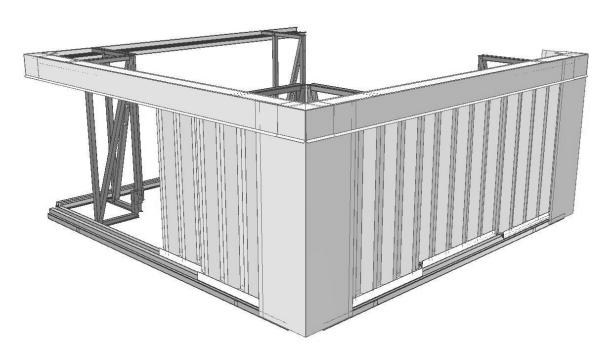
Hope the above is to your satisfaction.

Sincerely, Rudy Buchanan (P.Eng)





# TYPICAL SCREENING INSTALLATION INSTRUCTION



Nov. 25 / 14 5000026

# **WARNING:**

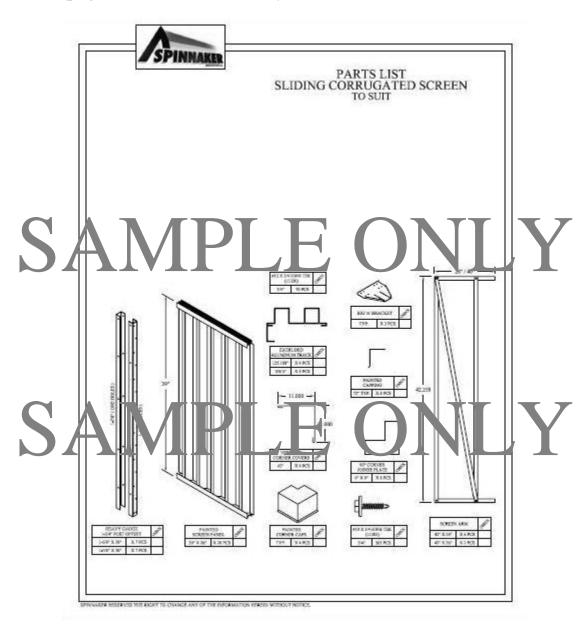
Any GAS, PROPANE and ELECTRICITY must be safely disconnected by a licensed technician. Failing to do so may result in property damage, personal injury and/or death.

# **Attention Installer:**

It is **YOUR** responsibility to verify post locations will not cause damage to unit and internal components by penetrating screws.

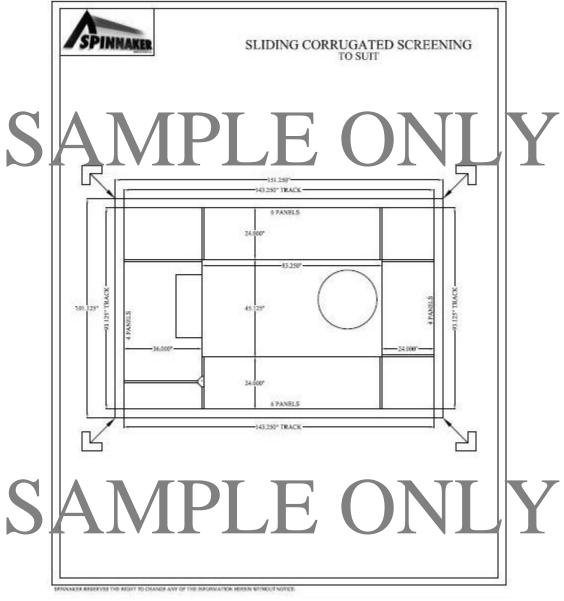
# **STEP 1:**

Take a minute to become familiar with the unit specific "PARTS LIST" page, it will be constantly referenced.



# **STEP 2:**

Turn to the unit specific "TRACK LENGTH" page.



Orient yourself in front of the unit and become familiar with the required offset distances on each side. Typically not all sides offset equal distances from the unit. Refer to the "PARTS LIST" page and find the part labeled "SCREEN ARM." "SCREEN ARMS" measure 4" longer then the offset dimension shown above, 24" on the drawing actually measures 28."

# **STEP 3:**

If your unit specific "PARTS LIST" page has "POST OFFSETS" they must be installed first. If not you may skip ahead to step 4. If they are required continue from here...

Referring to the chart below and the unit specific "TRACK LENGTH" page, identify the number of "POST OFFSETS" required on each side and approximate location.

Depending on the total height of the screen you will require a different amount of offsetting posts per arm, reference chart below.

SCREEN HEIGHT	#OF OFFSETTING POSTS
36"	2 x 10"
42"	2 x 10"
48"	3 x 10"
54"	3 x 10"
60"	3 x 10"
66"	4 x 10"
72"	4 x 10"
78"	4 x 10"
84"	3 x 24"
90"	3 x 24"
96"	3 x 24"
102"	3 x 24"
114"	4 x 24"
120"	4 x 24"

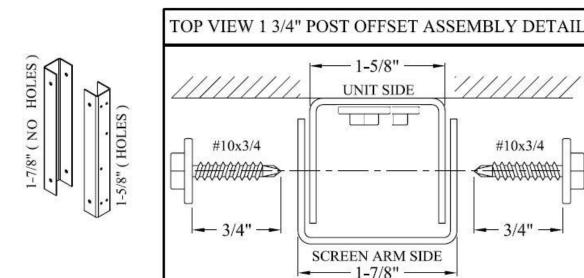
# **Attention Installer:**

It is **YOUR** responsibility to verify post locations will not damage to unit and internal components cause penetrating screws.

To properly secure offsetting posts first install 1-5/8" bracket to unit, through the holes provided. It is recommended that one offsetting bracket is mounted as low as possible on the unit and one bracket is mounted as high as possible. The remaining brackets should be installed as equally spaced and straight as possible.

Place the 1-7/8" wide bracket (no holes), over the mounted 1-5/8" brackets, align holes and secure with screws provided.

#10x3/4



## **STEP 4:**

# **Attention Installer:**

It is **YOUR** responsibility to verify post locations will not cause damage to unit and internal components by penetrating screws.

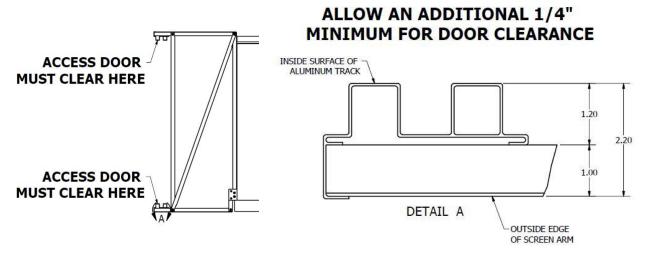
Refer to the unit specific "TRACK LENGTH" page, identify screen arm offsetting distance relative to the appropriate side of unit. Secure arms in approximate locations shown on "TRACK LENGTH" page using screws provided.

### **NOTE #1:**

All posts must be installed at a common height above the roofline of the unit.

#### **NOTE #2:**

All posts must be installed at a height that allows access doors to open no less then 90 degrees to the unit. For example, when the largest door is open, it MUST clear the aluminum track above and below the door.



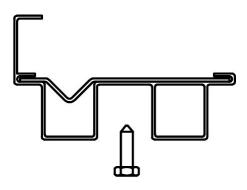
## **STEP 5:**

Refer to the unit specific "TRACK LENGTH" page, identify the length and quantity of aluminum track required relative to the appropriate side of unit. If more then 1 piece of aluminum track is required to achieve desired length, aluminum track joiner plates are required. (Typically 3' long and made from galvanized steel.)



# WHEN ASSEMBLING, ALWAYS SCREW FROM THE ALUMINUM SIDE INTO THE STEEL JOINER

### MINIMUM 2 SCREWS ON EACH SIDE OF JOINT

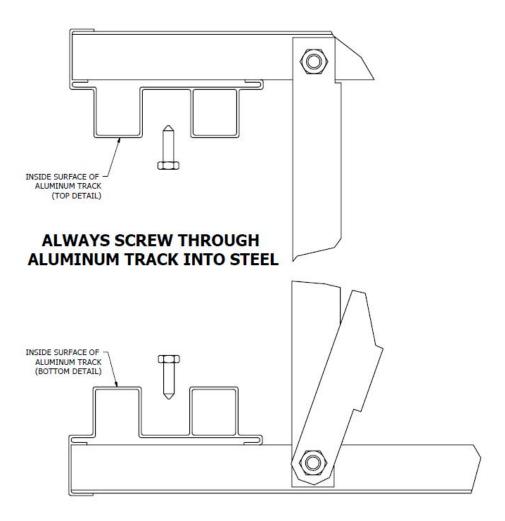


JOINER PLATE INSTALLED IN ALUMUINUM TRACK

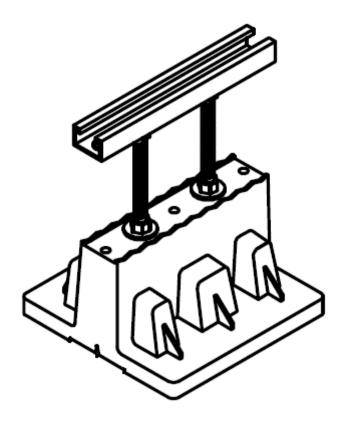
Prepare all tracking now. Join lengths of aluminum track (if required). Locate the corner joiner plates at this point. Refer to the "PARTS LIST" page for more information.

## STEP 6:

Start on one side of the unit with the bottom aluminum track resting on top of the screen arm. Clamp the aluminum tack to the screen arm or have a helper hold the track in position. Place a corner joiner plate in the end of the supported aluminum track and slide the next piece of track onto the adjacent side of corner joiner plate. You should now have an "L" shape. Adjust the tracking so the arms are perpendicular to the track and the "L" shape is 90 degrees. Screw through the aluminum track and into the steel arm. Repeat this step on the 3<sup>rd</sup> side of the screen and secure. To finish the last side of the track, place 2 corner joiners on the last track and slid them into the groves on the secured tracks simultaneously. Repeat this process for fastening the top aluminum track.



# **ROOF TOP BLOX**



The contractor may be required to make a stand or an extension for the roof top blox to support the track as required to suit site conditions. The roof top blox must be placed in an approved manor as to not damage the roof membrane and stay in place for the duration of the screen/unit life. This approval must be provided by the general or roofing contractor prior to installation.

## **STEP 7:**

Refer to the unit specific "TRACK LENGTH" page, identify the number of panels required on each side of the unit to achieve proper coverage. Note that all corner panels will be fixed to the outside track. At this time slide the required number of panels onto the aluminum track, keep in mind the outer panels should be fixed wherever possible and the inner panels slide for access. It is common on smaller units to only have the corner panels fixed. On larger units it becomes easier to have more panels secure because accessibility typically improves. Before fastening any panels to the aluminum track fasten the vertical corner covers to the face of the aluminum track only. ONLY AFTER ACCESS HAS BEEN CHECKED SHOULD THE VERTICAL CORNER COVERS BE SECURED IN THE MIDDLE TO THE FIXED PANELS THEY OVERLAP.

