

KABA Corporation

# Architectural Specifications

---

## KABA<sup>®</sup> Tape Bird Shock System

**7/2/2008**

This document provides architectural specifications for the KABA<sup>®</sup> Tape Bird Shock System. KABA is a registered trademark of KABA Corporation, Merrimack, NH. 3M is a trademark of 3M Company, St. Paul, MN.

## KABA® Tape

KABA Corporation  
654 Daniel Webster Highway  
Merrimack, NH 03054  
603-566-8595  
Fax: 603-424-4819  
Email: [Sales@KABAtape.com](mailto:Sales@KABAtape.com)  
Web: [www.KABAtape.com](http://www.KABAtape.com)

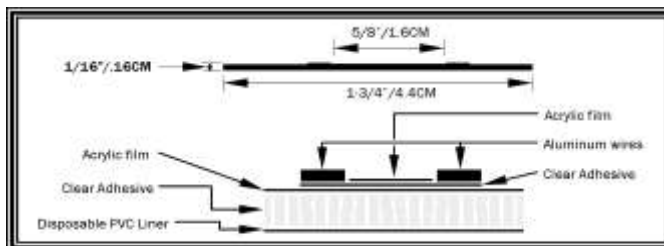
CSI Division: 10290/10296  
KABA Tape Bird Shock System

## MANUFACTURER

KABA Corporation manufactures KABA Tape. It features 2 flat aluminum wires secured by 3M™ 950 pressure sensitive adhesive to a clear acrylic film which is then bonded to 3M™ 4910 pressure sensitive adhesive. Tape is clear except for the 2 wires and offered in 50 foot rolls. Tape strips are connected by heavily insulated 20 AWG aluminum wires. Electrical connections are made with aluminum sleeves loaded with anti-oxidant paste. System power comes from solar or 110 VAC powered units which output capacitor discharge pulses that are DC voltage and very low amperage. Birds and animals are not harmed by the discharge and will display a fear behavior of the tape.

## PRODUCT PRESENTATION

KABA Tape Bird Shock System is contoured to sign letters, ledges, metal angle, sky lights, roofs and pipes to prohibit bird nesting, loafing and roosting. KABA Tape is effective against all bird species.



KABA Tape Construction

KABA Tape has an adhesive base exposed by removal of a PVC liner. Tape is installed on the outside edge of ledges. Additional strips may be required depending on the bird species, bird pressure and depth of ledge. Corners are made by folding the tape back upon itself and then folding again to angles of 0-120 degrees.

The 110 VAC power controllers are best placed under a protective weather hood, but this is not mandatory. They may be placed on a switched electrical circuit to disable the system for maintenance activities. Solar units require a general south facing and 2 hours of sun per day.

Contact with electrified tape can surprise unsuspecting individuals. Warning signs should be placed in areas where this is likely to occur.

Wire connections are made with aluminum sleeves. Excess anti-oxidant paste from the sleeves should be wiped off with a clean rag to avoid permanent stains on apparel.

### KABA Tape

Material: Impact modified acrylic, aluminum flat wire, 3M™ 950 and 4910 pressure sensitive adhesives

Width: 1.75" (4.5cm)

Height: 0.06" (.2cm)

Length: 50 feet (15.24m)

Mounting: Self adhesive or urethane sealant

### Power controllers

110 VAC Power controller

Material: Polyethylene

Width: 6" (15.2cm)

Height: 10" (25.5cm)

Depth: 3" (7.7cm)

Mounting: Screws

**Solar Power controller**

Material: Polyethylene

Width: 12" (30.4cm)

Height: 12" (30.4cm)

Depth: 12" (30.4cm)

Mounting: Screws

**APPLICATIONS**

KABA tape can be contoured to objects. It can be used to deter all bird species from loafing, nesting and roosting on ledges, sign letters, metal angle, sky lights, clay roof tile, pipes and more. Tape can be applied to bird feeder poles or trees to prevent varmints from climbing. Tape can be applied to marine vessels to deter seals and birds from resting on the craft. KABA should not be installed where children, unsuspecting workers or flammable materials are likely to be.

Intermittent capacitor discharge pulses produce a fear behavior in animals contacting the tape. Due to their fear, birds and animals avoid being in close proximity to the tape. Tape is installed with up to 6 inches between strips for large birds. Small, nimble birds have up to 4 inches between strips.

**ASSEMBLY ~ INSTALLATION**

First determine the type of power controller (110 V or solar) to be used and a suitable location for it. Power controllers should be placed within close proximity to the first strip of tape. 110 volt units can be placed on a constant power or dedicated switched circuit. Power consumption is about 5 watts. Units may be left outdoors and enclosures are optional. Solar units have to face south without obstructions.

Strips of tape should then be placed on items. The adhesive aggressively bonds to most surfaces except rubber and oil impregnated surfaces. Short

strips can be applied to test adhesion if there is doubt. Urethane sealant may be used to bond tape to difficult surfaces. Corners are made by folding the tape twice and instructions supplied with the product describe this.

Once the strips of KABA have been installed, heavy insulated jumper wire is used to connect the tape strips together and at least one pair of jumper wires will tie into the power controller. An aluminum sleeve connector is used throughout the entire system for all electrical connections.

For large installations, it is beneficial to create separate zones and connect all zones to the same power controller. If power issues occur at any time, zones can be selectively disconnected to pinpoint problem zones.

**MATERIALS ~ FINISHES**

KABA tape is a lamination composed of acrylic film, aluminum flat wire, 3M™ 950 and 4910 pressure sensitive adhesives. Tape comes in a matte finish. Gloss finish by request.

Jumper wire is custom made and described as a 20 AWG aluminum, solid, twisted pair, 10KV, PVC insulation jacketed wire. Sleeve connectors are aluminum and preloaded with anti-oxidant paste. Power controller shells are constructed of polyethylene.

**TECHNICAL SUPPORT**

KABA Corporation has knowledgeable staff available to assist in bird control matters. We can evaluate, recommend or refer local expertise if needed.

KABA can be contacted at (603) 566-8595  
FAX (603) 424-4819, e-mail [Sales@KABAtape.com](mailto:Sales@KABAtape.com)  
or web site [www.KABAtape.com](http://www.KABAtape.com).

## SPECIFICATION GUIDELINES

### GENERAL

#### 1.1 Description

- 1.1.1 Install KABA Tape on ledges and objects where birds roost, nest or socialize.

#### 1.2 Quality Assurance

- 1.2.1 Acquire technical literature from manufacturer or distributor. Provide photographs and make activity observations to facilitate evaluation.
- 1.2.2 Utilize KABA Certified installers or other pest control firms who are familiar with evaluating bird problems and installing electric bird shock systems.
- 1.2.3 Utilize companies recommended by KABA Corporation for difficult applications.

#### 1.3 Submittals

- 1.3.1 Submit manufacturer's samples, brochures, sketches and other descriptive materials.

#### 1.4 Product Handling

- 1.4.1 Protect KABA tape from damage before, during and after installation.
- 1.4.2 Damaged KABA tape should be replaced immediately.

### PRODUCTS

#### 2.1 Manufacturer

- 2.1.1 KABA Corporation  
654 Daniel Webster Highway  
Merrimack, NH 03054  
603-566-8595  
Fax: 603-424-4819  
Email: [Sales@KABAtape.com](mailto:Sales@KABAtape.com)  
Web: [www.KABAtape.com](http://www.KABAtape.com)

#### 2.2 Product designations

- |       |                        |            |
|-------|------------------------|------------|
| 2.2.1 | KABA Tape              | KABA CLEAR |
| 2.2.2 | 110V power controller  | PCACSD     |
| 2.2.3 | Solar power controller | PCSOLAR    |
| 2.2.4 | Sleeve connectors      | SLEEVES    |
| 2.2.5 | Jumper wire            | WIRE       |

### MATERIAL

#### KABA tape

- Material: Impact modified acrylic, aluminum flat wire, 3M™ 950 and 4910 pressure sensitive adhesives
- Width: 1.75" (4.5cm)
- Height: 0.06" (.2cm)
- Length: 50 feet (15.24m)
- Mounting: Self adhesive or urethane sealant

#### 110 VAC power controller – UL Approved

- Material: Polyethylene
- Width: 6" (15.2cm)
- Height: 10" (25.5cm)
- Depth: 3" (7.7cm)
- Range: 500 feet (152M)
- Input voltage: 110 VAC, 5W
- Output voltage: Capacitor discharge, 3KVDC, 1 second delay between pulses
- Mounting: Screws

#### Solar – UL Approved

- Material: Polyethylene
- Width: 12" (30.4cm)
- Height: 12" (30.4cm)
- Depth: 12" (30.4cm)
- Range: 2000 feet (610M)
- Input Voltage: Rechargeable battery, 2 yr. life
- Output voltage: Capacitor discharge, 8KVDC, 1 second delay between pulses
- Mounting: Screws

**Jumper Wire**

Material:	PVC insulation
Size:	20 AWG solid aluminum wire, twisted pair arrangement
Rating/voltage:	10KV
Specification:	Custom
Color:	Black
Length:	100 foot (30.48m) spool
Mounting:	Nylon cable loops

**2.3 Mounting Systems**

- 2.3.1 Metal, paint, enamel, mineral surface shingles, glass, terra cotta clay tile, plastics, composites, sealed concrete and sealed wood: Use peel & stick tape base.
- 2.3.2 Neoprene and EPDM, and petroleum substrates: Use urethane sealant.

**EXECUTION****3.1 Examination**

- 3.1.1 Examine installation area. Notify architect of detrimental work conditions.
- 3.1.2 Continue only after conditions are resolved.

**3.2 Surface preparation**

- 3.2.1 Surfaces must be 45°F (7°C) minimum at instance of contact; dust free and dry. Adhesion to substrates should be thoroughly evaluated under actual conditions. Unsealed concrete and wood surfaces must be unified with clear shellac, paint or other appropriate coatings.
- 3.2.2 Remove or repair objects that may damage the KABA Tape system after installation such as tree branches and loose items on the building.

**3.3 Installation**

- 3.3.1 Install the KABA Tape system as recommended by the installation instructions that are supplied by the manufacturer. KABA Tape is a landing deterrent, it is not a barrier. The tape should follow the contours of the architecture and lay in a straight line. The center line of the tape must be aligned to the top center line of pipes and sharp angled objects. Uneven installation may give the birds landing opportunities and create an unsightly appearance.
- 3.3.2 Tape must fully extend into each corner to prevent potential landing areas. For large birds the tape shall be positioned ½" (1.3cm) away from the outside edge. If the ledge is 8 inches and under high pressure, an additional strip of tape should be positioned 3" (7.6cm) from the back wall. It is acceptable to leave ≤ 6" (15.2cm) space between tape strips, measured from the tape centers.
- 3.3.3 For small, nimble birds or ledges over 10" (25.4cm), additional strips of tape may be required. Refer to KABA Corporation installation guide for details.
- 3.4. Inspection**
- 3.4.1 Visually inspect KABA Tape for poor adhesion due to inadequate surface preparation. Insure all jumper wire connections are dressed properly and secured. Remove all flat wire and jumper wire trimmings.
- 3.4.2 Use electric fence voltage tester to insure that voltages are present at the ends of tape strips.
- 3.4.3 Repair defects immediately as necessary.

## OPERATION ~ MAINTENANCE

If KABA Tape is installed per specifications, the system should remain virtually maintenance free.

Occasionally debris may fall or birds may drop debris on the tape in an attempt to rebuild a nest. Debris should be removed during a regularly scheduled maintenance service to insure system operation.

