Mastermark Pte Ltd 8 Temasek Boulevard Suntec Tower Three, #37-03 Singapore 038988 Phone (65) 6741 6880 Email info@mastermark.com.sg Web www.mastermark.com.sg www.mastermarkshop.com



**3/4" (19mm) Grid Size**– House Sparrows, Asian Glossy, Starlings



1 1/8" (50mm) Grid Size

— Asian Glossy Starlings,
Mynahs, Pigeons



**2" (75mm) Grid Size**— Crows, Herons, Egrets

### Material

High Density Polyethylene (HDPE) Multi-twine knotted 6-ply Fire retardant Ultra Violet Stabilised Rot resistant

# **Melting Point**

~135°C

#### Twine Ø

6 strands of polyethylene 12/1000" each wrapped rope-like into each twine

### **Break Strength**

20kg per twisted strand

# **Netting Sizes**

50ft by 50ft or; 25ft by 25ft

#### Colours

Black Sand

### MR - Manufacturer

Mastermark Pte Ltd employs a third party manufacturer to produce Mastermark Bird Netting exclusively.

# PR — Product Presentation

Mastermark Bird Netting can be installed on a variety of different areas to provide total exlcusion of pest birds.

Made with High Density Polyethylene (HDPE) Multi-twine knotted 6-ply, Mastermark Bird Netting is strong, versatile and able to last about 10 years or more on average in Singapore's weather conditions. Knotted netting prevents the net from unraveling when cut, keeping the integrity of the net. Each UV stabalised twisted strand has a break strength of up to 20kg.

# **UA** — Uses and Applications

Netting can be used to prevent access to any bird in or on any architectural structure. The net can be installed horizontally, vertically or in any direction required to achieve the desired effect.

### AI — Assembly and Installation

For a successful Installation you will require a variety of fixtures and fittings, which may require an experienced installer to fit.

Fixtures will depend on which substrate the netting is being fixed onto, masonry, timber, sheet metal and structural steel work all require different fixtures.

For detailed installation guidelines please refer to our instruction manual, which can be downloaded on any of our websites listed at the top of the page.

### MR — Materials and Finishes

Mastermark Bird Netting is made of High Density Polyethylene (HDPE) Multi-twine knotted 6-ply that has been Ultra Violet stabalised.

# OM — Operation and Maintenance

If Mastermark Bird Netting is installed as per our specifications by professionals, the product should not need any maintenance.

# LR - Legal Requirements

Check with your local authority or governing body prior to installation of bird netting to ensure that there are no planning consents required for your proposed installation.

Property owners / operators are legally responsible for ensuring that bird control netting is well maintained and will not trap or harm birds of any kind.

#### MW - Manufacturer's Warranty

All netting supplied by Mastermark comes with a 2 year limited manufacturer's warranty against failure duev to UV degradation or manufacturing defects, from the date of P.O.D.

# **TS - Technical Support**

Mastermark's professional field representatives are available to assist in any aspect of evaluation, product recommendation and even in installlation. Call +65 6741 6880 or email drawings and other pertinent information to info@mastermark.com.sg. Free consultations are available.

#### General

#### 1. Description

1.1 To block access of pest birds in order to prevent bird nesting or perching, or where damage to building surfaces caused by bird excrement and to protect from bird perching, install Mastermark Bird Netting any open area or opening.

#### 2. Quality Assurrance

2.1 Obtain technical literature from supplier, telephone consultation and plan/photograph evaluation.

2.2 Utilize certified installers, in your area who carry the proper insurance coverage. Contact Mastermark to engage our installation services.

#### 3. Submittals

3.1 Submit manufacturer's samples, catalog cuts, shop sketches and other descriptive material.

# 4. Product Handling

4.1 Protect Mastermark Bird Netting from damages before, during and after installations.

4.2 If damage occurs to Masterspikes, replace damaged product immediately.

# **Products**

5. Acceptable Manufacturer

5.1 Mastermark Pte Ltd, 8 Temasek Boulevard, Suntec Tower Three, #37-03, Singapore 038988

- 6. Mastermark Bird Netting 3/4 inches grid size
- 7. Mastemrark Bird Netting 1 1/8 inches grid size
- 8. Mastermark Bird Netting 2 inches grid size

# 9. Mounting Systems

9.1 Structural Steel: for corner attachments use beam clamps or beam bolts. For intermediates use hammer on beam clips.

9.2 Sheet Metal: for corner attachments use cladding bolts or beam bolts. For intermediates use angle brackets with self drill screws and rubber bonded washers, or net guides or surface mount bases and adhesive.

9.3 Masonry: for corner fixings use corner eye bolts. For intermediate fixings use screw eyes or screw pins with wall plugs, or split pins and anchor rivets.

9.4 Timber: for corner fixings use vine eyes. For intermediate fixings use screw eyes or screw pins.

9.5 Wire Rope:  $7 \times 7$  construction, 2mm diameter wire rope. Use copper ferrules and a crimp tool, or cable grips and a wire rope grip nut spinner for retaining the cable. Use a barrel strainer at every 10m or around no more than one corner to tension the wire rope.

9.6 Cable to Net fixings: Use hog rings and a hog ring stapler, with netting corner ties at each corner fixing.

9.7 Correct intermediate fixing spacings: 1m intervals for 75mm and 50mm mesh. 0.5m intervals for 40mm and 28mm mesh, 0.3m intervals for 19mm mesh.

#### Execution

10. Examination

10.1 Examine installation area. Notify architect of detrimental work conditions.

10.2 Do not proceed until conditions are corrected.

#### 11. Surface Preparation

11.1 Bird droppings shall be removed in a safe manner; large quantities shall be removed and disposed of by licensed waste removal carrier. Work areas shall be cleaned and repair work shall be done in areas which will be excluded by netting.

11.2 Remove or repair articles that may damage the Post & Wire system after installation, such as tree limbs and loose parts of the building.

# 12. Installation

12.1 Install Bird Netting as recommended in the installation instructions, which can be downloaded from any of our websites listed at the top of this document. Ensure there are no gaps to prevent birds from entering into the area behind the netting.

12.2 The correct mesh size shall be specified to ensure exclusion of the correct pest bird

12.3 Ensure the netting is installed and tensioned as tightly as possible to make the installation effective, long lasting and prevent causing any harm to the birds.

### 13. Inspection

13.1 Visually inspect netting for poor adherence to mounting surfaces, tears, sagging, or other problems related to poor installation or surface preparation.

11.5.1 Repair as necessary immediately to avoid trapping birds in damaged netting.