Hanger Kits, Adapters, Ties, Clamps, and Hoisting Grips

## Click-On Hangers

Click-On Hangers - Install Cable with One Easy "Click"
Specifically designed to support HELIAX ${ }^{\circledR}$ coaxial cable, stackable Click-On Hangers install in just minutes and provide a perfect fit that gives your PCS/ PCN, cellular, microwave, rural telephony, GSM, or other telecommunications system a professional appearance, especially in confined spaces. Available in either single or double versions, Click-On Hangers are manufactured of tough UVresistant material and set the standard for durability, simplicity of installation, and cost effectiveness. Click-On Hangers are sold in kits of 10 .


ORDERING INFORMATION

| Double | Single* |  |
| :--- | :--- | :--- |
| Part Number | Part Number | Hanger Description |
| L4CLICK | L4SCLICK | $1 / 2^{\prime \prime}$ Hanger for LDF4, kit of 10 |
| L45CLICK | NA | 5/8" Hanger for LDF4.5, kit of 10 |
| L5CLICKB | L5SCLICKB | 7/8" Hanger for LDF5, VXL5, kit of 10 |
| L6CLICK | L6SCLICK | 1-1/4" Hanger for LDF6, VXL6, kit of 10 |
| L7CLICK | L7SCLICK | $1-5 / 8^{\prime \prime}$ Hanger for LDF7, VXL7, kit of 10 |

*Contact Andrew for information on hangers complete with angle adapter and hardware.


Flat Member Attachment


Round Member Attachment


Angle Adapter Attachment


Ceiling Adapter Attachment

SUPPORT HARDWARE ORDERING INFORMATION

| Part Number | Hardware Description |
| :--- | :--- |
| 243684 | Compact Angle Adapter |
| 244350 | Ceiling Adapter |

Click-On Hanger Hardware Kits
Click-On Hanger attachment hardware is available in $3 / 8^{\prime \prime}$ or M10 sizes. Constructed of stainless steel for durability. Select hardware length according to planned hanger stack height.


ORDERING INFORMATION

| Imperial <br> Part Number | Metric <br> Part Number | Stack Height <br> (\# of hangers) | Cable Size |
| :--- | :--- | :--- | :--- |
| $243095-9$ | $243095-11$ | 1 | $1 / 2^{\prime \prime}$ or $7 / 8^{\prime \prime}$ |
| $243095-5$ | $243095-7$ | 2 | $1 / 2^{\prime \prime}$ or $7 / 8^{\prime \prime}$ |
| $243095-1$ | $243095-3$ | 3 | $1 / 2^{\prime \prime}$ or $7 / 8^{\prime \prime}$ |
| $243095-12$ | $243095-10$ | 1 | $1-1 / 4^{\prime \prime}$ or $1-5 / 8^{\prime \prime}$ |
| $243095-8$ | $243095-6$ | 2 | $1-1 / 4^{\prime \prime}$ or $1-5 / 8^{\prime \prime}$ |
| $243095-4$ | $243095-2$ | 3 | $1-1 / 4^{\prime \prime}$ or $1-5 / 8^{\prime \prime}$ |

Each kit contains 10 threaded rods, 20 nuts, 40 flat washers and 40 lock washers.
ATTACHMENT HARDWARE DIMENSIONS

| Part Number | Rod Length <br> (inches) | Rod Length <br> (millimeters) |
| :--- | :--- | :--- |
| $243095-11$ | 3.97 | 101 |
| $243095-7$ | 5.5 | 141 |
| $243095-3$ | 7.1 | 181 |
| $243095-12$ | 5 | 126 |
| $243095-8$ | 7.3 | 186 |
| $243095-4$ | 9.9 | 251 |
| $243095-9$ | 3.75 | 95 |
| $243095-5$ | 5.4 | 137 |
| $243095-1$ | 7 | 177 |
| $243095-10$ | 4.75 | 121 |
| $243095-6$ | 7.25 | 184 |
| $243095-2$ | 9.75 | 248 |

Note: Click-On Hangers accommodate two runs of cable and can be stacked up to three deep to handle up to six runs.

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Page 1 of 4

# ANDREW。 

Teletilt ${ }^{\text {® }}$
Cable Installation Accessories
Hanger Kits, Adapters, Ties, Clamps, and Hoisting Grips

DECIBEL ${ }^{\circ}$
Base Station Antennas

## Miniature Click-On Hangers

Fast, easy installation for small cables Now installing small cables into hangers is accomplished in one easy click with new Miniature Click-On Hangers.
Each compact, Miniature Click-On Hanger accommodates two runs of cable. Miniature Click-On Hangers are
 compact and stackable, making it easy to install several runs of cable in confined spaces.
Miniature Click-On Hangers are cost effective and durable. With flexible gripping ribs, the hanger provides secure support on a range of cable sizes, and indexing on the hanger body helps align cables during installation. Specifically designed to accommodate small corrugated coaxial cables, elliptical waveguide, and braided cable runs, Miniature Click-On Hangers provide a perfect fit for your installation. Hangers are packed in kits of 10. Attachment hardware sold separately in kits of 10.


ORDERING INFORMATION

| Hanger <br> Part Number | Description |
| :--- | :--- |
| 68MCLICK | Click-On Hangers for 6-8 mm cable; |
|  | FSJ1A, CNT-240, CNT-300, BR-240, BR-300, kit of 10 |
| 912MCLICK | Click-On Hangers for 9-12 mm cable; |
|  | LDF1, EFX2, FSJ2, LDF2, CNT-400, BR-400, kit of 10 |
| 1316 MCLICK | Click-On Hangers for 13-16 mm cable; |
|  | FSJ4, LDF4-50A, CNT-500, CNT-600, BR-600, kit of 10 |

SUPPORT HARDWARE ORDERING INFORMATION
Select hardware by intended hanger stack height.

| Part Number | Hardware Description |
| :---: | :--- |
| $252026-10 \mathrm{KT}$ | Mini Angle Adapters, kit of 10 |
| $252027-10 \mathrm{KT}$ | Single Stack Hardware for |
|  | Mini Click-On Hangers, kit of 10 |
| $252028-10 \mathrm{KT}$ | Double Stack Hardware for |
|  | Mini Click-On Hangers, kit of 10 |
| $252029-10 \mathrm{KT}$ | Triple Stack Hardware for <br>  <br>  Mini Click-On Hangers, kit of 10 |

## Other Mounting Hardware

Threaded Rod Support Kit for Standard Hangers. Use to mount hangers away from supporting structure, under cable bridge, and inside equipment room. Includes $3 / 8$ " diameter threaded rod, galvanized ceiling mounting plate, nuts, and washers. Attach to angle tower
 members with 31768A angle adapters. Attach to round tower members with 30848 series tower standoffs. All components are stainless steel, except ceiling mounting plate.
ORDERING INFORMATION

| Kit of $\mathbf{1}$ <br> Part Number | Kit of $\mathbf{5}$ <br> Part Number | Rod Length-in (mm) |
| :--- | :--- | :--- |
| 31771 | $31771-4$ | $12(305)$ |
| $31771-9$ | $31771-6$ | $24(610)$ |
| - | $31771-10$ | $36(915)$ |

## Angle Adapter <br> Galvanized and Non-marring

For mounting $1 / 2^{\prime \prime}$ to $2-1 / 4^{\prime \prime}$ cable hangers to angle tower members up to $3 / 4^{\prime \prime}(19 \mathrm{~mm}$ ) thick. Hanger attachment hardware sold separately (see above).
Kit of 10.
ORDERING INFORMATION


| Part Number | Description |
| :--- | :--- |
| $247763-1$ | Tapped for 3/8" hardware |
| 247763 | Tapped for metric hardware |

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## Compact Stainless Steel

## Angle Adapters

These compact, lightweight, high quality stainless steel angle adapters provide a cost saving option to standard adapters for many wireless systems that use HELIAX ${ }^{\circledR}$ coaxial cable. These compact angle adapters are suitable for use with single runs of HELIAX cable up to $2-1 / 4$ " in diameter. When used
 with our stackable Click-On Hangers, they can accommodate up to six runs of HELIAX LDF6 1-1/4" cable or smaller cable and up to four runs of HELIAX LDF7 1-5/8" cable. Includes $3 / 8^{\prime \prime}$ or mid-hanger attachment hardware. Kit of 10.

## ORDERING INFORMATION

| Part Number | Description |
| :--- | :--- |
| 243684 | Imperial Angle Adapter, kit of 10 |
| $243684-\mathrm{M}$ | Metric Angle Adapter, kit of 10 |

## Round Member Adapter

Stainless steel clamps to mount $1 / 2^{\prime \prime}$ to 4 " cable hangers to round support members. Two each are needed for $3^{\prime \prime}$ and $4^{\prime \prime}$ cable hangers. Kit of 10.


ORDERING INFORMATION

| Part Number | Member Diameter, in (mm) |
| :--- | :--- |
| $31670-1$ | $1-2(25-50)$ |
| $31670-2$ | $2-3(50-75)$ |
| $31670-3$ | $3-4(75-100)$ |
| $31670-4$ | $4-5(100-125)$ |
| $31670-5$ | $5-6(125-150)$ |
| $31670-6$ | $6-8(150-200)$ |

## Tower Standoff

Adapters with round member clamps and hardware for $1 / 2^{\prime \prime}$ to 4 " hangers. All parts are stainless steel or galvanized. Kit of 10.

ORDERING INFORMATION

| $\mathbf{1}$ in $(25 \mathrm{~mm})$ <br> Standoff | 2.5 in $(60 \mathrm{~mm})$ <br> Standoff | Member Diameter <br> in $(\mathrm{mm})$ |
| :--- | :--- | :--- |
| $30848-5$ | - | $0.75-1.5(20-40)$ |
| $30848-4$ | - | $1.5-3.0(40-75)$ |
| $30848-1$ | $41108 \mathrm{~A}-1$ | $3-4(75-100)$ |
| $30848-2$ | $41108 \mathrm{~A}-2$ | $4-5(100-125)$ |
| $30848-3$ | $41108 \mathrm{~A}-3$ | $5-6(125-150)$ |

Clamp Head
ORDERING INFORMATION

| Part Number | Description |
| :--- | :--- |
| MF39901-10 | Clamp Head, kit of 10 |

## $45^{\circ}$ Adapter

Use with angle adapter and threaded rod support kit to place a hanger at a waveguide bend. Galvanized steel. Kit of 10.
ORDERING INFORMATION

| Part Number | Description |
| :--- | :--- |
| 42334 | $45^{\circ}$ Adapter, kit of 10 |

## Nylon Cable Ties For Jumper Cable Attachment

Cable ties secure cable bundles where space is limited. They are an excellent choice for organizing jumper cables within and between radio cabinets and for bundling
 jumper cables. Nylon cable ties provide support for small diameter cable $1 / 4^{\prime \prime}$ to $1 / 2^{\prime \prime}$. Typical applications include securing jumper cables in buildings and along horizontal antenna mounting arms.
ORDERING INFORMATION

| Part Number | Description |
| :---: | :--- |
| 40417 | Nylon Cable Ties, $5 / 16^{\prime \prime}$ wide $14.5^{\prime \prime}$ long, kit of 50 |
| Velcro $^{\circledR}$ Cable Ties for High Vibration Areas |  |

Our Velcro cable ties are the easiest way to organize your in-rack cabling. They're secure in high vibration areas and require no special tying procedure.
Reuse to accommodate future expansion. Black, 8" (203 mm) length. Maximum bundle diameter, 2 " ( 51 mm ). Minimum bundle diameter, 0.25 " $(6.4 \mathrm{~mm})$. Tensile strength, $40 \mathrm{lb}(178 \mathrm{~N})$. For
indoor use only.
Velcro is a registered
trademark of Velcro Industries.
ORDERING INFORMATION

| Part Number | Description |
| :--- | :--- |
| VCT8-10 | Velcro Cable Ties, kit of 10 |
| VCT8-50 | Velcro Cable Ties, kit of 50 |
| VCT8-100 | Velcro Cable Ties, kit of 100 |

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| ANDREW• | Teletilt ${ }^{\circledR}$ <br> Cable Installation Accessories <br> Hanger Kits, Adapters, Ties, Clamps, and Hoisting Grips | DECIBEL <br> Base Station Antennas |
| :--- | :--- | :--- |

Hanger Selection Guide


| Hanger Type | SnapStak ${ }^{\text {TM }}$ Hangers | Click-On Single, Double, or Miniature Hangers | Support / Hoisting Grips* | Cable Ties** |
| :---: | :---: | :---: | :---: | :---: |
| Construction | Stainless steel | Engineered plastic single or double | Tin coated bronze | Nylon |
| Cable runs supported | 1 to 3 | 2 to 6 | 1 | 1 |
| Primary applications | Towers with pre-punched cable ladders, snap-in accessories | Rooftops, water towers and towers with limited space | Monopole towers | Jumper cables and inter-rack cabling |
| Typical installation time (minutes)** | 7 | 20 | 2 | N/A |
| Key feature | Attaches cables in compact bundles saving tower space | Stackable up to three high | Calibrated clamp provides permanent cable support | Universal fastening |
| Benefits | Fastest hanger installation No additional hardware needed | Attaches cables in compact six run bundles | Quick installation | Fits most cable sizes and tower members |
|  | Attaches cables in compact three run bundles | Versatile and adaptable to almost any application | Monopole application | Quick installation |
|  | Impervious to environmental extremes | Easy to install click-on design | Accommodates single run of cable | Inexpensive |
|  | Universal hanger accommodates all corrugated cables | UV stable |  | Accommodates single run of lightweight cable |
| Attachment capability (Tower member type) | 3/4" drilled cable ladder | 3/8" (M10) drilled hardware ladder | All towers and monopoles | Round member Angle member Cable ladders |
|  | Various adapters | Various adapters |  |  |
| Additional parts needed | None | Threaded rod and hardware | None | None |
| Tower adapters (allows hanger attachment to various tower types) | Cluster mount <br> Universal tower adapter <br> Anchor rail adapter | Round member adapter Angle adapter | None required | None required |

## Conditions

* Support Grip or Hoisting/Support Grip required with all cable installations
** Should only be used with $1 / 2^{\prime \prime}$ cable and smaller
${ }^{* * *}$ Installation time based on a $100 \mathrm{ft}(30 \mathrm{~m})$ run of $7 / 8$ " cable with $3 \mathrm{ft}(1 \mathrm{~m})$ hanger spacing. Monopole application applied 200 ft intervals, 2 minutes.

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