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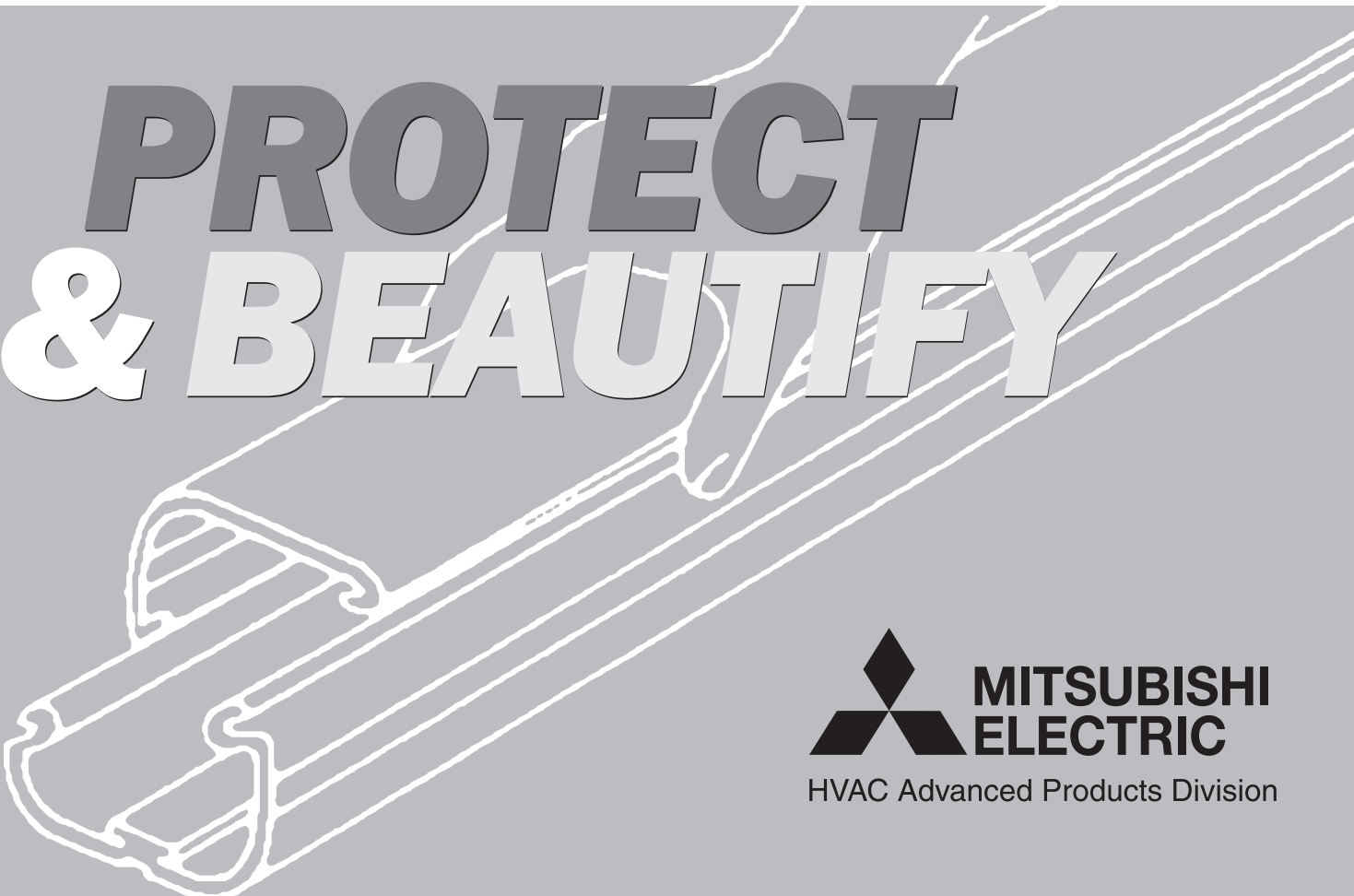
No. LIOCA 100710M

INSTALLATION INSTRUCTIONS

LINE-HIDE™ **Lineset Cover System**

Perfect for **Mr. SLIM®** and other A/C and plumbing applications and installations.

**PROTECT
& BEAUTIFY**



 **mitsubishi
electric**
HVAC Advanced Products Division

LINE-HIDE™

INSTALLATION INSTRUCTIONS

WARNING! Before you begin . . .

Whenever you're working with tools, it's a good idea to wear appropriate safety gear: helmet, protective goggles, and gloves. If you're working high above the ground, be sure that you have sound footing.



Installing Line-Hide

Your Line-Hide installation will go smoothly if you follow — **in order** — the steps outlined in these instructions: determine layout; install entry fittings and joint bases; install Line Tube base; insert Lineset; assemble tube, and assemble joints. When you've finished, caulk the lineset entry and exit points on the wall to ensure the protection of the Lineset and of the building.

Step 1: Layout

Identify the inlet and outlet points for the Lineset



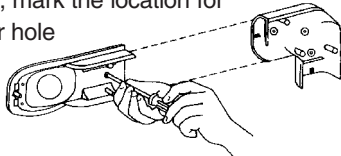
you'll be installing within the Line-Hide product, and determine the simplest and most appropriate route for the installation to follow. In most cases you'll want your installation to run perfectly vertical and nearly horizontal (a slight grade will enable condensate lines to drain) and adhere to 90 degree turns. Sketching your installation on a contractor worksheet or graph paper will help you to determine how much tubing and how many elbows, joints, and other pieces you will need.

Try to adhere to a grid defined by parallel and perpendicular lines and 90-degree angles

Step 2: Install Entry Fittings and Joint Bases

Most Line-Hide entry fittings and joints (including elbows) include a base and a cover. Once you've determined where your joints will be, install the bases. If you're installing on wood, simply position the base, and fasten it to the wall, using wood screws. Don't overtighten, or you'll risk cracking the plastic.

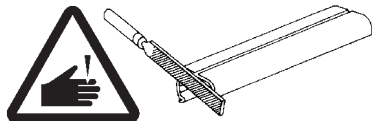
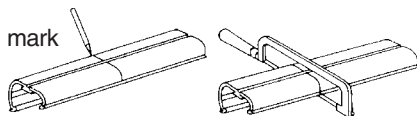
For installations on a brick wall, mark the location for each screw, and drill an anchor hole using a masonry bit; then use appropriate anchors and screws.



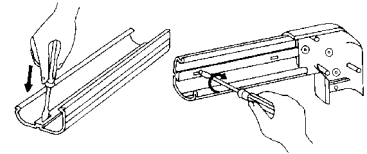
Step 3: Install Line Tube Base

Measure the distance between the molded stops of each joint base, and determine the length of tube needed. Line-Hide Line Tube is manufactured in six-and-one-half-foot (two-meter) lengths so some straight runs are fabricated using two or more lengths of tube and a socket/coupling.

To **cut** tube, measure and mark the appropriate length; then draw a perpendicular guideline across the tube. Use a hacksaw to cut the tube along the line, and then use a file to smooth the cut edge.



To **attach** the Line Tube base to the wall, first use the tip of a screwdriver to make a hole in the central rib of the base (thin spots

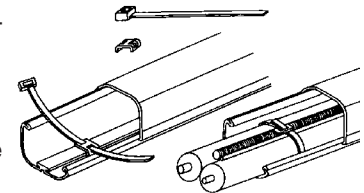


are moulded in to accommodate installation). Then put a screw through the hole in the tube, and tighten it to the wall. Be careful not to overtighten, for you may distort the tube. For the smaller sizes (the 60 and 75 series), place screws approximately every twelve inches. For the larger sizes (the 100 and 140 series), use screws approximately every six inches.

Step 4: Install the Lineset

Unwind insulated refrigerant lines, and place into straight portion of the tube. When installing insulated refrigerant pipe into a corner, adjust the pipe to the shape of the joint, and gently bend the insulated refrigerant pipe without forcing it. Bending too quickly can cause kinks in insulated refrigerant pipe and can pinch drain pipe. Also try to avoid compressing the pipe insulation.

A Saddle Band (NV-S short or NV-L long) can be used to fasten the insulated refrigerant pipe, drain pipe, and electric cable together in the Line Tube. The *saddle* snaps to the central rib of the tube base.

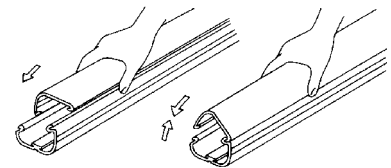


Thread the band through the saddle and around the piping and cable, and pull it tight. This procedure will help to keep the pipes and wiring in place.

As a general rule, use one saddle band for every three feet (one meter) of tube.

Step 5: Assemble the Line Tube

When the Lineset is in position, attach the tube cover to the base. Slip the lip on the short



edge of the cover into the trough on the high edge of the base. Then squeeze the short end of the base while pushing the long edge of the cover inward so that the lip and the trough engage.

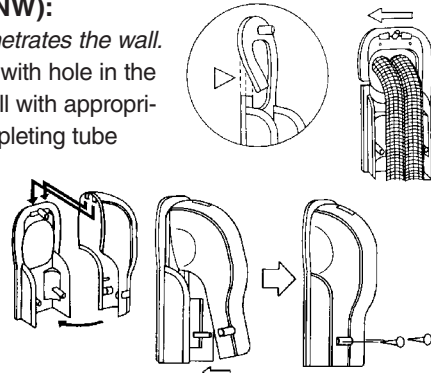
Step 6: Assemble the Joints

With the Line Tube completely assembled, return to each joint, and complete assembly. Position the cover of each joint over its base; line up the holes; then secure cover to bases with the stainless steel screws provided.

Installation Instructions for Specific Items

Wall Cover Inlet (NW):

Use where piping penetrates the wall. Align wall cover base with hole in the wall, and fasten to wall with appropriate screws. After completing tube assembly, push the tube downward (in the direction of the arrows) after aligning the base with the stopper built-in to the top portion of wall cover. This process will temporarily fasten wall cover.

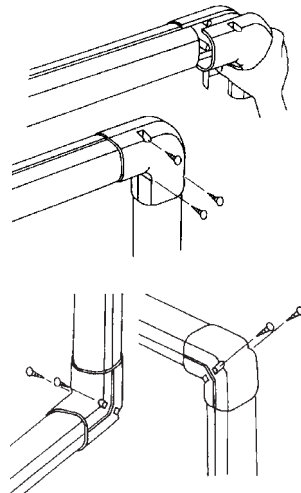


Simple Wall Cover (NY):

One-piece inlet is used where refrigerant piping penetrates the building wall. Locate cover over Lineset, and mark mounting holes. Mount and secure Line Tube to wall. Carefully bend refrigerant tubing, drain and/or wiring into Line Tube. Place a bead of caulk on the wall cover flange. Place Simple Wall Cover over wall opening, and secure with appropriate screws and anchors.

Elbows – 90 degree horizontal (NE) and vertical (NC), 45 degree horizontal (NM) and vertical (NU), and universal horizontal (NX) and vertical (NZ):

Use where piping from the outdoor unit rises vertically or turns horizontally along the wall. Position the elbow base on the wall where it will be fastened, and attach to the wall with appropriate screws. After installing tube, align the elbow cover to the elbow base, and attach with the stainless steel screws provided.



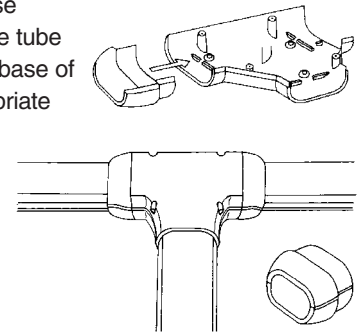
All vertical elbows — NC, NU, NZ — are reversible for use in both inside and outside corner applications. Cover screws can be inserted in either direction required.

T-Joint (NT):

Use where piping branches off. To change tube size, use the appropriate adapter set. Contents of Accessory Adapter Sets

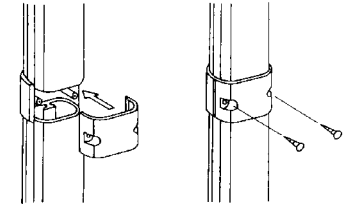
NT-75	75mm-60mm adapter	2 sets
NT-100	100mm-60mm adapter	2 sets
	100mm-75mm adapter	2 sets
NT-140	140mm-100mm adapter	2 sets

Fit the accessory adapter base appropriate for the proper size tube into the T-Joint base. Fasten base of T-Joint to wall with the appropriate screws. After tube base is installed and the lineset positioned, and the tube cover snapped on, attach the T-Joint cover to the T-Joint base with the stainless steel screws provided.



Socket/Coupling (NS):

Use to lengthen and extend tubes and to prevent tube cover from sliding. Mark the length of the tube; then position the socket base so that the tube will abut the molded plastic stop of the socket; then attach the socket to the wall with appropriate screws. After installing tube, align cover with holes in socket base, and fasten with the stainless steel screws provided.

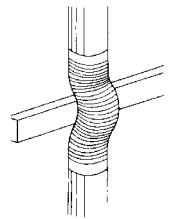


Variant Socket/Reducer (NJ):

Use to connect Line Tubes of different sizes. Before attaching base to wall, determine that the converter corresponds to the varying tube sizes you'll be joining and that it is oriented properly on the wall. Then attach with the appropriate screws. Locate Line Tubes, and install covers. Place socket covers over base; align holes, and fasten with stainless steel screws provided.

Flexible Joint (NF):

Use where piping bends over protrusion (such as side molding) on wall. If your installation requires the use of flexible joint, **INSTALL IT FIRST. Flexible joints are not split.** Simply slide the flexible joint over the piping, and secure it in place.

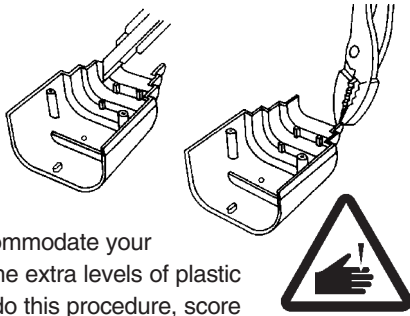


To connect flexible joint to Line Tube, slide end of the flexible joint into the end of tube base, and fasten it with appropriate screws. To help ensure a tight fit, compress the bellows of the flexible joint. After the flexible joint is released, it will expand against the tube to make a tight, strong connection. When the assembly is complete, snap the tube cover onto the tube base so that the end of the flexible joint is concealed.

End Socket (NR):

Use to accommodate various lineset combinations.

Before attaching the end socket, determine which of the various openings will best accommodate your lineset. Then remove the extra levels of plastic on the end socket. To do this procedure, score the plastic with a utility knife (make sure you're wearing gloves) where you want to break it. Then, holding the end socket in one hand, use pliers to grip the excess plastic, and snap it off (make sure you're wearing safety goggles, as the plastic can break in unexpected ways). Use a file to smooth any rough edges.



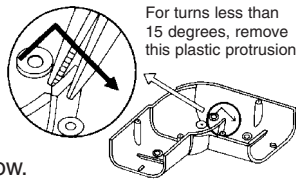
NOTE: Attempting to snap the plastic without scoring it first will likely crack the end socket.

With the excess plastic removed, attach the base with screws; install the tube, and attach the cover. See the socket/coupling instructions for more details.

Universal Elbow, Horizontal (NX) and Vertical (NZ):

Use to change duct direction at an angle between 45 and 90 degrees.

When elbow is angled at 0 to 15 degrees, break off the protrusion inside the universal elbow using pliers (as shown at right) in the direction of the arrow.



WARNING: Flying fragments of plastic may pose a hazard when breaking off the protrusion inside the universal elbow. Be

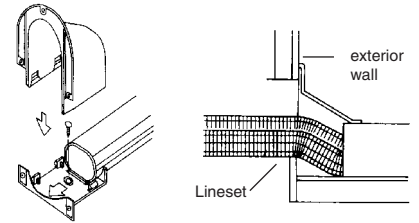
sure to wear safety glasses and gloves, and make sure that others in the area are wearing appropriate safety gear as well.



Corner Cap/Soffit Entry Fitting (NA):

Use where piping comes through ceiling, wall, etc.

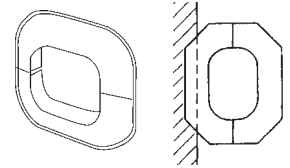
With Line Tube in place, locate the bottom of the corner cap against the wall, and attach with appropriate screws. Then snap the top portion to the bottom portion and attach it to the base with the stainless steel screws provided.



Wall Entry Fitting (NK):

Use to provide a good seal where tube comes through wall.

Simply fit the bottom and top portions around the inlet hole in the wall, and attach with appropriate screws. Wall Entry Fitting may be trimmed to fit by scoring the bottom portion, then snapping off the excess plastic.



Caulking

To help ensure that the lineset remains free of corrosion and mildew resulting from excess moisture, use caulking to seal around the Line-Hide product where the lineset exits and enters the wall.

LINE-HIDE™

Lineset Cover System



HVAC Advanced Products Division

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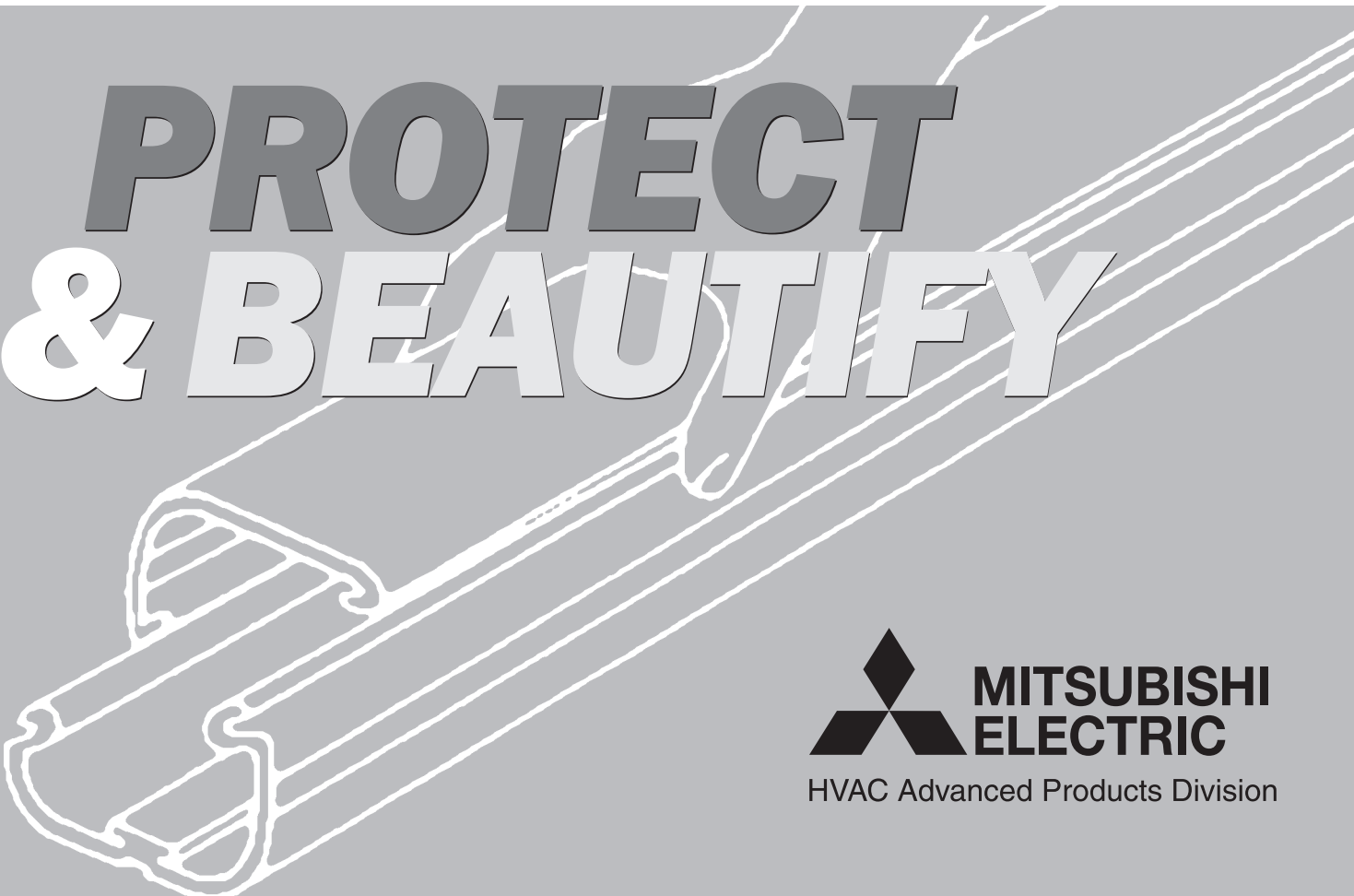
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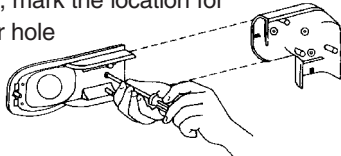
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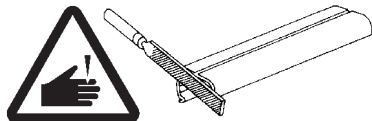
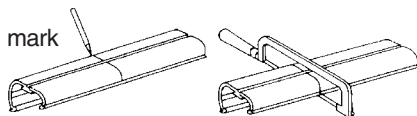
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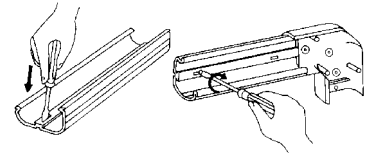
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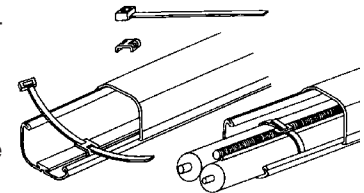


are moulded in to accommodate installation). Then put a screw through the hole in the tube, and tighten it to the wall. Be careful not to overtighten, for you may distort the tube. For the smaller sizes (the 60 and 75 series), place screws approximately every twelve inches. For the larger sizes (the 100 and 140 series), use screws approximately every six inches.

Step 4: Install the Lineset

Unwind insulated refrigerant lines, and place into straight portion of the tube. When installing insulated refrigerant pipe into a corner, adjust the pipe to the shape of the joint, and gently bend the insulated refrigerant pipe without forcing it. Bending too quickly can cause kinks in insulated refrigerant pipe and can pinch drain pipe. Also try to avoid compressing the pipe insulation.

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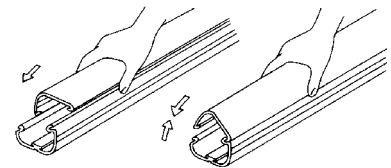


Thread the band through the saddle and around the piping and cable, and pull it tight. This procedure will help to keep the pipes and wiring in place.

As a general rule, use one saddle band for every three feet (one meter) of tube.

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When the Lineset is in position, attach the tube cover to the base. Slip the lip on the short



edge of the cover into the trough on the high edge of the base. Then squeeze the short end of the base while pushing the long edge of the cover inward so that the lip and the trough engage.

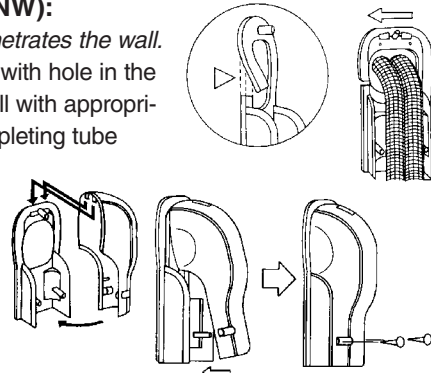
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Wall Cover Inlet (NW):

Use where piping penetrates the wall. Align wall cover base with hole in the wall, and fasten to wall with appropriate screws. After completing tube assembly, push the tube downward (in the direction of the arrows) after aligning the base with the stopper built-in to the top portion of wall cover. This process will temporarily fasten wall cover.



Simple Wall Cover (NY):

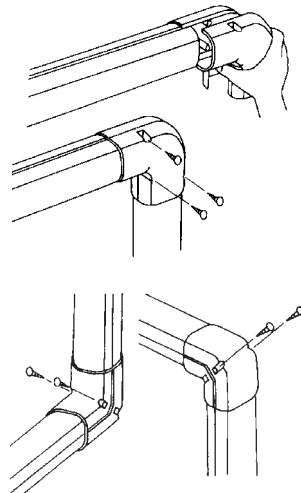
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Use where piping from the outdoor unit rises vertically or turns horizontally along the wall.

Position the elbow base on the wall where it will be fastened, and attach to the wall with appropriate screws. After installing tube, align the elbow cover to the elbow base, and attach with the stainless steel screws provided.



All vertical elbows — NC, NU, NZ — are reversible for use in both inside and outside corner applications. Cover screws can be inserted in either direction required.

T-Joint (NT):

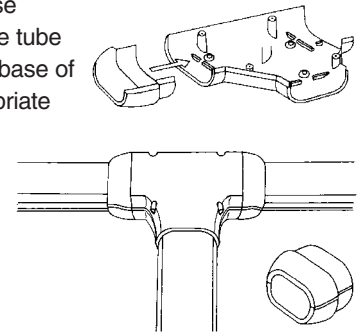
Use where piping branches off.

To change tube size, use the appropriate adapter set.

Contents of Accessory Adapter Sets

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	100mm-75mm adapter	2 sets
NT-140	140mm-100mm adapter	2 sets

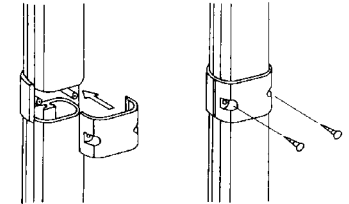
Fit the accessory adapter base appropriate for the proper size tube into the T-Joint base. Fasten base of T-Joint to wall with the appropriate screws. After tube base is installed and the lineset positioned, and the tube cover snapped on, attach the T-Joint cover to the T-Joint base with the stainless steel screws provided.



Socket/Coupling (NS):

Use to lengthen and extend tubes and to prevent tube cover from sliding.

Mark the length of the tube; then position the socket base so that the tube will abut the molded plastic stop of the socket; then attach the socket to the wall with appropriate screws. After installing tube, align cover with holes in socket base, and fasten with the stainless steel screws provided.



Variant Socket/Reducer (NJ):

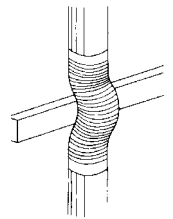
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Flexible Joint (NF):

Use where piping bends over protrusion (such as side molding) on wall.

If your installation requires the use of flexible joint, **INSTALL IT FIRST. Flexible joints are not split.** Simply slide the flexible joint over the piping, and secure it in place.

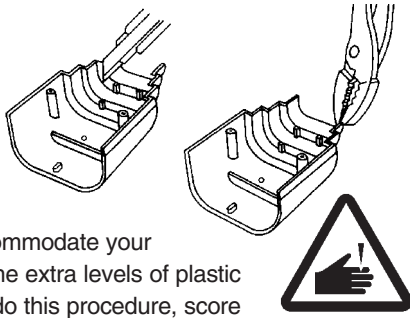


To connect flexible joint to Line Tube, slide end of the flexible joint into the end of tube base, and fasten it with appropriate screws. To help ensure a tight fit, compress the bellows of the flexible joint. After the flexible joint is released, it will expand against the tube to make a tight, strong connection. When the assembly is complete, snap the tube cover onto the tube base so that the end of the flexible joint is concealed.

End Socket (NR):

Use to accommodate various lineset combinations.

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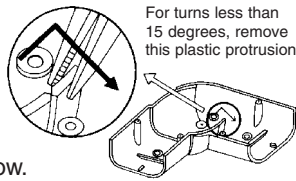
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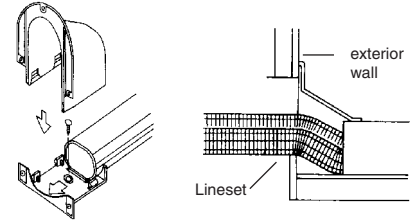
WARNING: Flying fragments of plastic may pose a hazard when breaking off the protrusion inside the universal elbow. Be sure to wear safety glasses and gloves, and make sure that others in the area are wearing appropriate safety gear as well.



Corner Cap/Soffit Entry Fitting (NA):

Use where piping comes through ceiling, wall, etc.

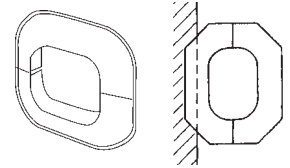
With Line Tube in place, locate the bottom of the corner cap against the wall, and attach with appropriate screws. Then snap the top portion to the bottom portion and attach it to the base with the stainless steel screws provided.



Wall Entry Fitting (NK):

Use to provide a good seal where tube comes through wall.

Simply fit the bottom and top portions around the inlet hole in the wall, and attach with appropriate screws. Wall Entry Fitting may be trimmed to fit by scoring the bottom portion, then snapping off the excess plastic.



Caulking

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HVAC Advanced Products Division

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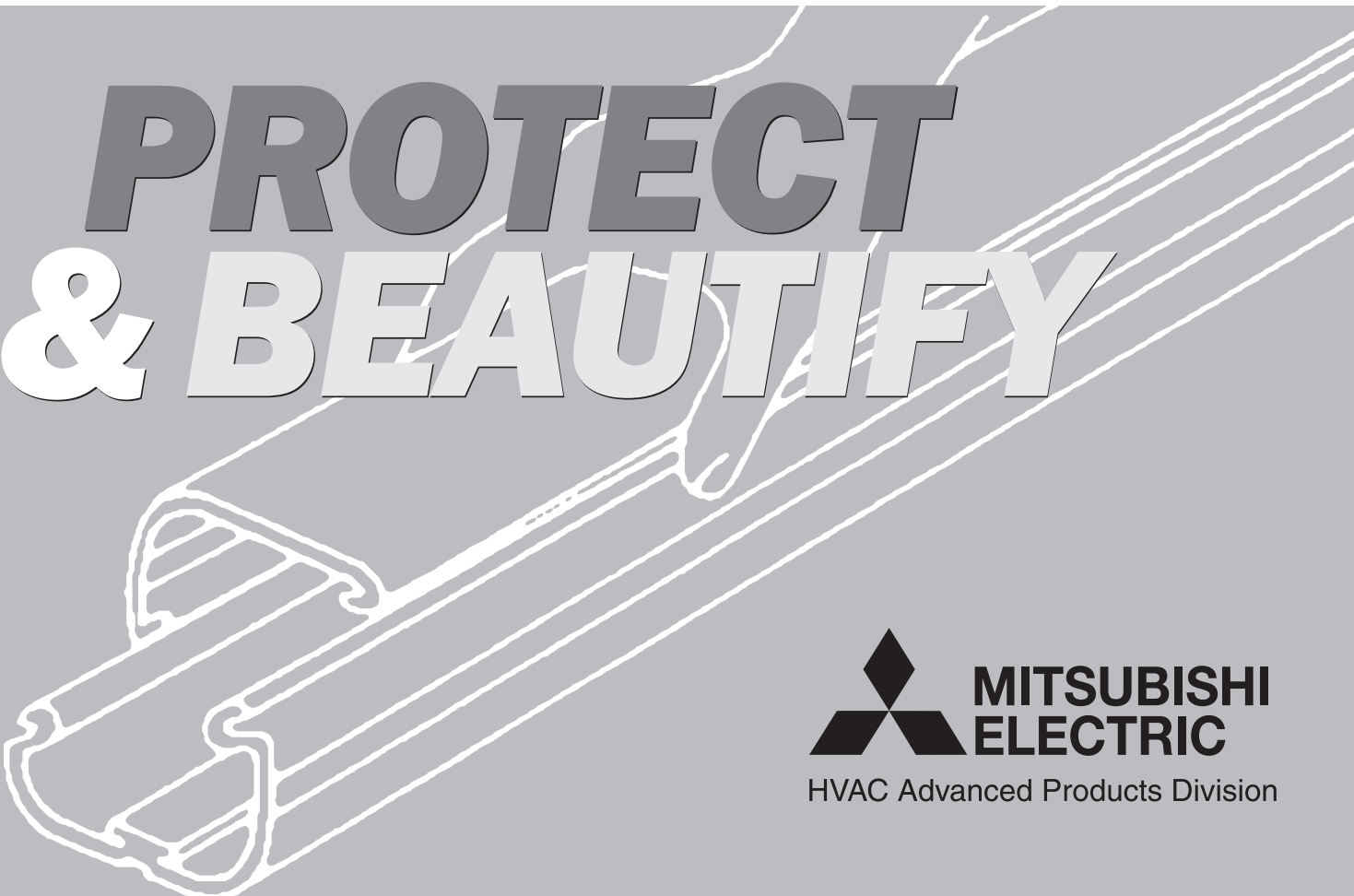
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Step 1: Layout

Identify the inlet and outlet points for the Lineset you'll be installing within the Line-Hide product, and determine the simplest and most appropriate route for the installation to follow. In most cases you'll want your installation to run perfectly vertical and nearly horizontal (a slight grade will enable condensate lines to drain) and adhere to 90 degree turns. Sketching your installation on a contractor worksheet or graph paper will help you to determine how much tubing and how many elbows, joints, and other pieces you will need.

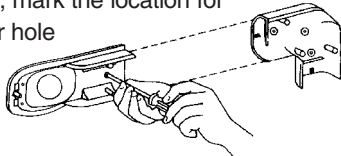


Try to adhere to a grid defined by parallel and perpendicular lines and 90-degree angles

Step 2: Install Entry Fittings and Joint Bases

Most Line-Hide entry fittings and joints (including elbows) include a base and a cover. Once you've determined where your joints will be, install the bases. If you're installing on wood, simply position the base, and fasten it to the wall, using wood screws. Don't overtighten, or you'll risk cracking the plastic.

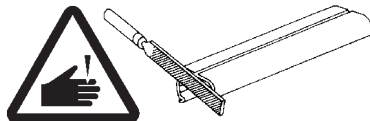
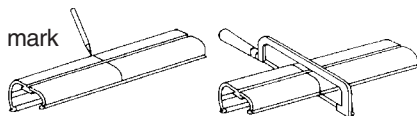
For installations on a brick wall, mark the location for each screw, and drill an anchor hole using a masonry bit; then use appropriate anchors and screws.



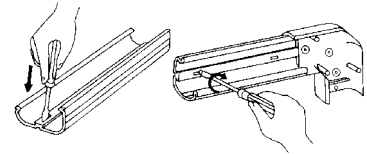
Step 3: Install Line Tube Base

Measure the distance between the molded stops of each joint base, and determine the length of tube needed. Line-Hide Line Tube is manufactured in six-and-one-half-foot (two-meter) lengths so some straight runs are fabricated using two or more lengths of tube and a socket/coupling.

To **cut** tube, measure and mark the appropriate length; then draw a perpendicular guideline across the tube. Use a hacksaw to cut the tube along the line, and then use a file to smooth the cut edge.



To **attach** the Line Tube base to the wall, first use the tip of a screwdriver to make a hole in the central rib of the base (thin spots



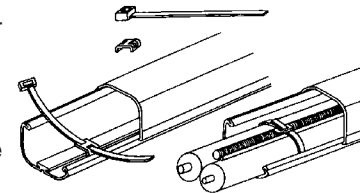
are moulded in to accommodate installation). Then put a screw through the hole in the tube, and tighten it to the wall. Be careful not to overtighten, for you may distort the tube. For the smaller sizes (the 60 and 75 series), place screws approximately every twelve inches. For the larger sizes (the 100 and 140 series), use screws approximately every six inches.

Step 4: Install the Lineset

Unwind insulated refrigerant lines, and place into straight portion of the tube. When installing insulated refrigerant pipe into a corner, adjust the pipe to the shape of the joint, and gently bend the insulated refrigerant pipe without forcing it. Bending too quickly can cause kinks in insulated refrigerant pipe and can pinch drain pipe. Also try to avoid compressing the pipe insulation.

A Saddle Band (NV-S short or NV-L long) can be used to fasten the insulated refrigerant pipe, drain pipe, and electric cable together in the Line Tube. The *saddle* snaps to the central rib of the tube base.

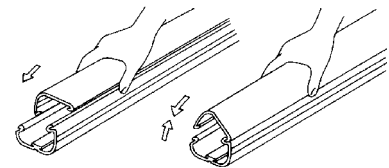
Thread the band through the saddle and around the piping and cable, and pull it tight. This procedure will help to keep the pipes and wiring in place.



As a general rule, use one saddle band for every three feet (one meter) of tube.

Step 5: Assemble the Line Tube

When the Lineset is in position, attach the tube cover to the base. Slip the lip on the short edge of the cover into the trough on the high edge of the base. Then squeeze the short end of the base while pushing the long edge of the cover inward so that the lip and the trough engage.



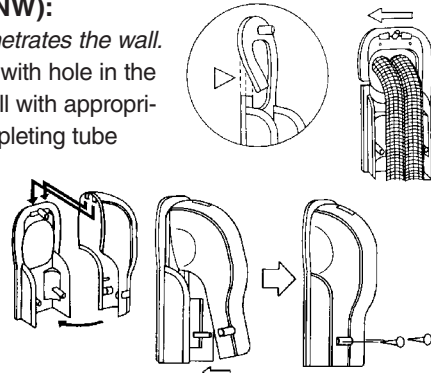
Step 6: Assemble the Joints

With the Line Tube completely assembled, return to each joint, and complete assembly. Position the cover of each joint over its base; line up the holes; then secure cover to bases with the stainless steel screws provided.

Installation Instructions for Specific Items

Wall Cover Inlet (NW):

Use where piping penetrates the wall. Align wall cover base with hole in the wall, and fasten to wall with appropriate screws. After completing tube assembly, push the tube downward (in the direction of the arrows) after aligning the base with the stopper built-in to the top portion of wall cover. This process will temporarily fasten wall cover.



Simple Wall Cover (NY):

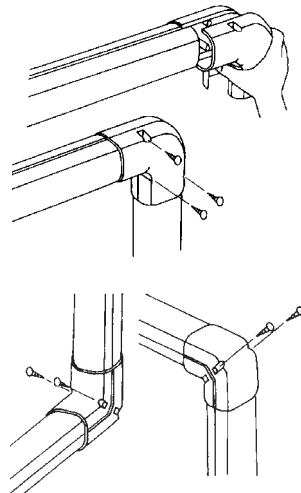
One-piece inlet is used where refrigerant piping penetrates the building wall.

Locate cover over Lineset, and mark mounting holes. Mount and secure Line Tube to wall. Carefully bend refrigerant tubing, drain and/or wiring into Line Tube. Place a bead of caulk on the wall cover flange. Place Simple Wall Cover over wall opening, and secure with appropriate screws and anchors.

Elbows – 90 degree horizontal (NE) and vertical (NC), 45 degree horizontal (NM) and vertical (NU), and universal horizontal (NX) and vertical (NZ):

Use where piping from the outdoor unit rises vertically or turns horizontally along the wall.

Position the elbow base on the wall where it will be fastened, and attach to the wall with appropriate screws. After installing tube, align the elbow cover to the elbow base, and attach with the stainless steel screws provided.



All vertical elbows — NC, NU, NZ — are reversible for use in both inside and outside corner applications. Cover screws can be inserted in either direction required.

T-Joint (NT):

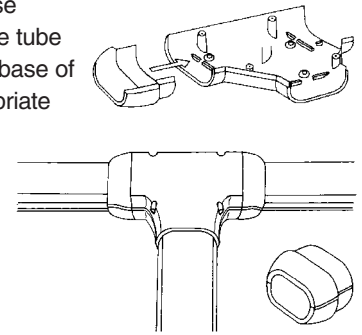
Use where piping branches off.

To change tube size, use the appropriate adapter set.

Contents of Accessory Adapter Sets

NT-75	75mm-60mm adapter	2 sets
NT-100	100mm-60mm adapter	2 sets
	100mm-75mm adapter	2 sets
NT-140	140mm-100mm adapter	2 sets

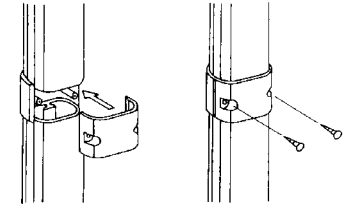
Fit the accessory adapter base appropriate for the proper size tube into the T-Joint base. Fasten base of T-Joint to wall with the appropriate screws. After tube base is installed and the lineset positioned, and the tube cover snapped on, attach the T-Joint cover to the T-Joint base with the stainless steel screws provided.



Socket/Coupling (NS):

Use to lengthen and extend tubes and to prevent tube cover from sliding.

Mark the length of the tube; then position the socket base so that the tube will abut the molded plastic stop of the socket; then attach the socket to the wall with appropriate screws. After installing tube, align cover with holes in socket base, and fasten with the stainless steel screws provided.



Variant Socket/Reducer (NJ):

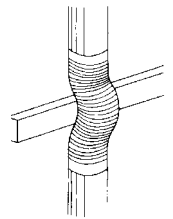
Use to connect Line Tubes of different sizes.

Before attaching base to wall, determine that the converter corresponds to the varying tube sizes you'll be joining and that it is oriented properly on the wall. Then attach with the appropriate screws. Locate Line Tubes, and install covers. Place socket covers over base; align holes, and fasten with stainless steel screws provided.

Flexible Joint (NF):

Use where piping bends over protrusion (such as side molding) on wall.

If your installation requires the use of flexible joint, **INSTALL IT FIRST. Flexible joints are not split.** Simply slide the flexible joint over the piping, and secure it in place.

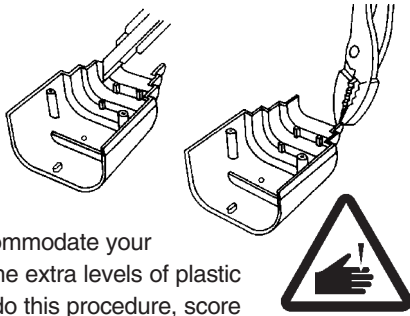


To connect flexible joint to Line Tube, slide end of the flexible joint into the end of tube base, and fasten it with appropriate screws. To help ensure a tight fit, compress the bellows of the flexible joint. After the flexible joint is released, it will expand against the tube to make a tight, strong connection. When the assembly is complete, snap the tube cover onto the tube base so that the end of the flexible joint is concealed.

End Socket (NR):

Use to accommodate various lineset combinations.

Before attaching the end socket, determine which of the various openings will best accommodate your lineset. Then remove the extra levels of plastic on the end socket. To do this procedure, score the plastic with a utility knife (make sure you're wearing gloves) where you want to break it. Then, holding the end socket in one hand, use pliers to grip the excess plastic, and snap it off (make sure you're wearing safety goggles, as the plastic can break in unexpected ways). Use a file to smooth any rough edges.



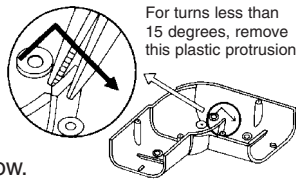
NOTE: Attempting to snap the plastic without scoring it first will likely crack the end socket.

With the excess plastic removed, attach the base with screws; install the tube, and attach the cover. See the socket/coupling instructions for more details.

Universal Elbow, Horizontal (NX) and Vertical (NZ):

Use to change duct direction at an angle between 45 and 90 degrees.

When elbow is angled at 0 to 15 degrees, break off the protrusion inside the universal elbow using pliers (as shown at right) in the direction of the arrow.



WARNING: Flying fragments of plastic may pose a hazard when breaking off the protrusion inside the universal elbow. Be

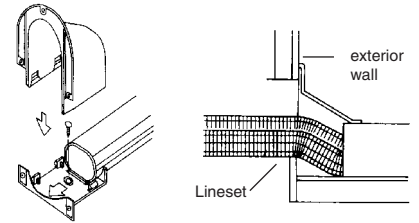
sure to wear safety glasses and gloves, and make sure that others in the area are wearing appropriate safety gear as well.



Corner Cap/Soffit Entry Fitting (NA):

Use where piping comes through ceiling, wall, etc.

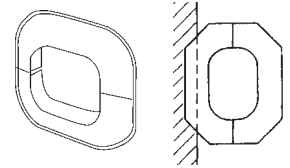
With Line Tube in place, locate the bottom of the corner cap against the wall, and attach with appropriate screws. Then snap the top portion to the bottom portion and attach it to the base with the stainless steel screws provided.



Wall Entry Fitting (NK):

Use to provide a good seal where tube comes through wall.

Simply fit the bottom and top portions around the inlet hole in the wall, and attach with appropriate screws. Wall Entry Fitting may be trimmed to fit by scoring the bottom portion, then snapping off the excess plastic.



Caulking

To help ensure that the lineset remains free of corrosion and mildew resulting from excess moisture, use caulking to seal around the Line-Hide product where the lineset exits and enters the wall.

LINE-HIDE™

Lineset Cover System



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No. LIOCA 100710M

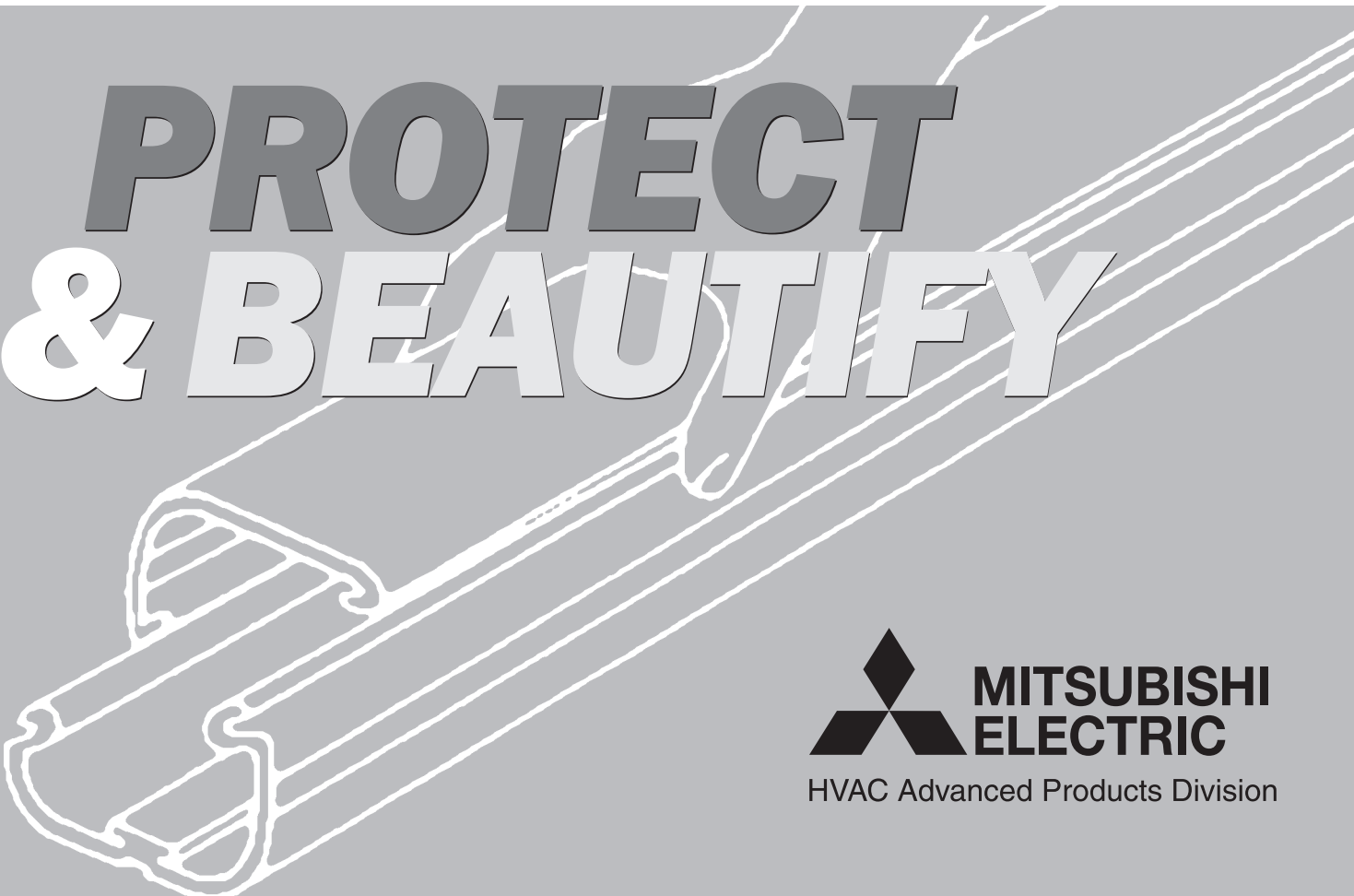
INSTALLATION INSTRUCTIONS

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Lineset Cover System

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**PROTECT
& BEAUTIFY**



 **mitsubishi
electric**
HVAC Advanced Products Division

LINE-HIDE™

INSTALLATION INSTRUCTIONS

WARNING! Before you begin . . .

Whenever you're working with tools, it's a good idea to wear appropriate safety gear: helmet, protective goggles, and gloves. If you're working high above the ground, be sure that you have sound footing.



Installing Line-Hide

Your Line-Hide installation will go smoothly if you follow — **in order** — the steps outlined in these instructions: determine layout; install entry fittings and joint bases; install Line Tube base; insert Lineset: assemble tube, and assemble joints. When you've finished, caulk the lineset entry and exit points on the wall to ensure the protection of the Lineset and of the building.

Step 1: Layout

Identify the inlet and outlet points for the Lineset



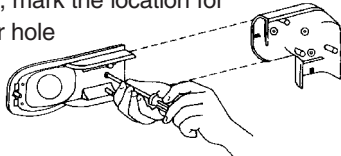
you'll be installing within the Line-Hide product, and determine the simplest and most appropriate route for the installation to follow. In most cases you'll want your installation to run perfectly vertical and nearly horizontal (a slight grade will enable condensate lines to drain) and adhere to 90 degree turns. Sketching your installation on a contractor worksheet or graph paper will help you to determine how much tubing and how many elbows, joints, and other pieces you will need.

Try to adhere to a grid defined by parallel and perpendicular lines and 90-degree angles

Step 2: Install Entry Fittings and Joint Bases

Most Line-Hide entry fittings and joints (including elbows) include a base and a cover. Once you've determined where your joints will be, install the bases. If you're installing on wood, simply position the base, and fasten it to the wall, using wood screws. Don't overtighten, or you'll risk cracking the plastic.

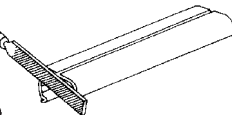
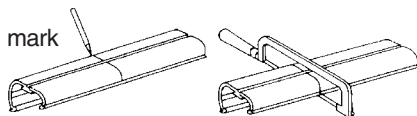
For installations on a brick wall, mark the location for each screw, and drill an anchor hole using a masonry bit; then use appropriate anchors and screws.



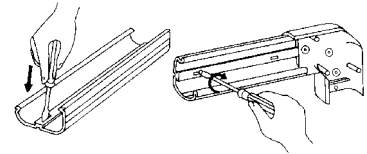
Step 3: Install Line Tube Base

Measure the distance between the molded stops of each joint base, and determine the length of tube needed. Line-Hide Line Tube is manufactured in six-and-one-half-foot (two-meter) lengths so some straight runs are fabricated using two or more lengths of tube and a socket/coupling.

To **cut** tube, measure and mark the appropriate length; then draw a perpendicular guideline across the tube. Use a hacksaw to cut the tube along the line, and then use a file to smooth the cut edge.



To **attach** the Line Tube base to the wall, first use the tip of a screwdriver to make a hole in the central rib of the base (thin spots

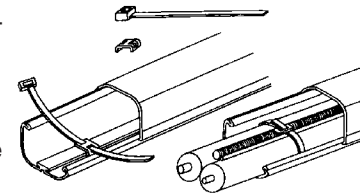


are moulded in to accommodate installation). Then put a screw through the hole in the tube, and tighten it to the wall. Be careful not to overtighten, for you may distort the tube. For the smaller sizes (the 60 and 75 series), place screws approximately every twelve inches. For the larger sizes (the 100 and 140 series), use screws approximately every six inches.

Step 4: Install the Lineset

Unwind insulated refrigerant lines, and place into straight portion of the tube. When installing insulated refrigerant pipe into a corner, adjust the pipe to the shape of the joint, and gently bend the insulated refrigerant pipe without forcing it. Bending too quickly can cause kinks in insulated refrigerant pipe and can pinch drain pipe. Also try to avoid compressing the pipe insulation.

A Saddle Band (NV-S short or NV-L long) can be used to fasten the insulated refrigerant pipe, drain pipe, and electric cable together in the Line Tube. The *saddle* snaps to the central rib of the tube base.

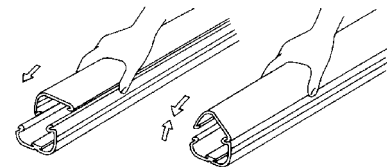


Thread the band through the saddle and around the piping and cable, and pull it tight. This procedure will help to keep the pipes and wiring in place.

As a general rule, use one saddle band for every three feet (one meter) of tube.

Step 5: Assemble the Line Tube

When the Lineset is in position, attach the tube cover to the base. Slip the lip on the short



edge of the cover into the trough on the high edge of the base. Then squeeze the short end of the base while pushing the long edge of the cover inward so that the lip and the trough engage.

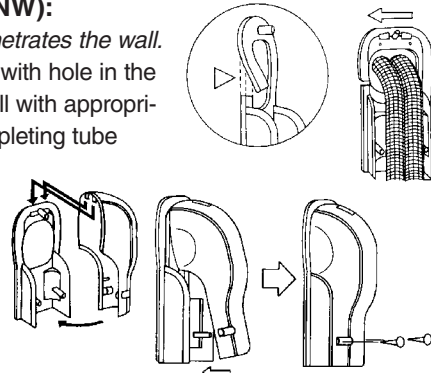
Step 6: Assemble the Joints

With the Line Tube completely assembled, return to each joint, and complete assembly. Position the cover of each joint over its base; line up the holes; then secure cover to bases with the stainless steel screws provided.

Installation Instructions for Specific Items

Wall Cover Inlet (NW):

Use where piping penetrates the wall. Align wall cover base with hole in the wall, and fasten to wall with appropriate screws. After completing tube assembly, push the tube downward (in the direction of the arrows) after aligning the base with the stopper built-in to the top portion of wall cover. This process will temporarily fasten wall cover.



Simple Wall Cover (NY):

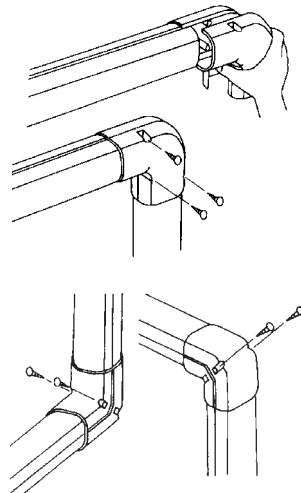
One-piece inlet is used where refrigerant piping penetrates the building wall.

Locate cover over Lineset, and mark mounting holes. Mount and secure Line Tube to wall. Carefully bend refrigerant tubing, drain and/or wiring into Line Tube. Place a bead of caulk on the wall cover flange. Place Simple Wall Cover over wall opening, and secure with appropriate screws and anchors.

Elbows – 90 degree horizontal (NE) and vertical (NC), 45 degree horizontal (NM) and vertical (NU), and universal horizontal (NX) and vertical (NZ):

Use where piping from the outdoor unit rises vertically or turns horizontally along the wall.

Position the elbow base on the wall where it will be fastened, and attach to the wall with appropriate screws. After installing tube, align the elbow cover to the elbow base, and attach with the stainless steel screws provided.



All vertical elbows — NC, NU, NZ — are reversible for use in both inside and outside corner applications. Cover screws can be inserted in either direction required.

T-Joint (NT):

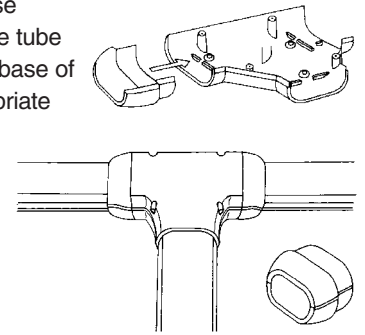
Use where piping branches off.

To change tube size, use the appropriate adapter set.

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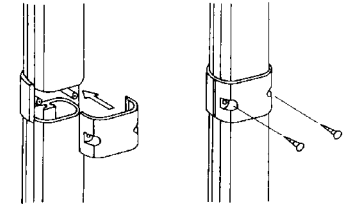
Fit the accessory adapter base appropriate for the proper size tube into the T-Joint base. Fasten base of T-Joint to wall with the appropriate screws. After tube base is installed and the lineset positioned, and the tube cover snapped on, attach the T-Joint cover to the T-Joint base with the stainless steel screws provided.



Socket/Coupling (NS):

Use to lengthen and extend tubes and to prevent tube cover from sliding.

Mark the length of the tube; then position the socket base so that the tube will abut the molded plastic stop of the socket; then attach the socket to the wall with appropriate screws. After installing tube, align cover with holes in socket base, and fasten with the stainless steel screws provided.



Variant Socket/Reducer (NJ):

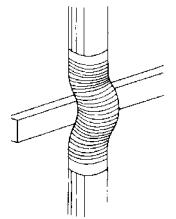
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Flexible Joint (NF):

Use where piping bends over protrusion (such as side molding) on wall.

If your installation requires the use of flexible joint, **INSTALL IT FIRST. Flexible joints are not split.** Simply slide the flexible joint over the piping, and secure it in place.

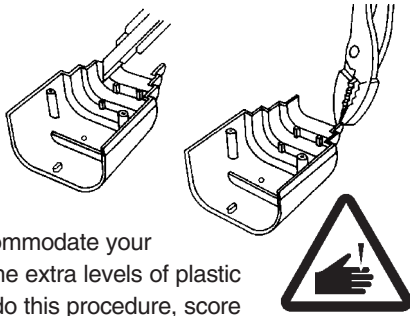


To connect flexible joint to Line Tube, slide end of the flexible joint into the end of tube base, and fasten it with appropriate screws. To help ensure a tight fit, compress the bellows of the flexible joint. After the flexible joint is released, it will expand against the tube to make a tight, strong connection. When the assembly is complete, snap the tube cover onto the tube base so that the end of the flexible joint is concealed.

End Socket (NR):

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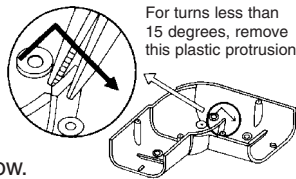
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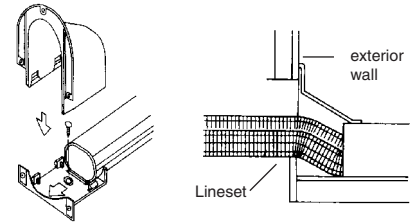
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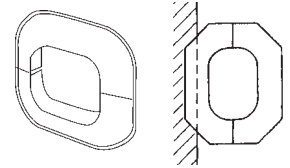
With Line Tube in place, locate the bottom of the corner cap against the wall, and attach with appropriate screws. Then snap the top portion to the bottom portion and attach it to the base with the stainless steel screws provided.



Wall Entry Fitting (NK):

Use to provide a good seal where tube comes through wall.

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LINE-HIDE™
Lineset Cover System

**MITSUBISHI
ELECTRIC**

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No. LIOCA 100710M

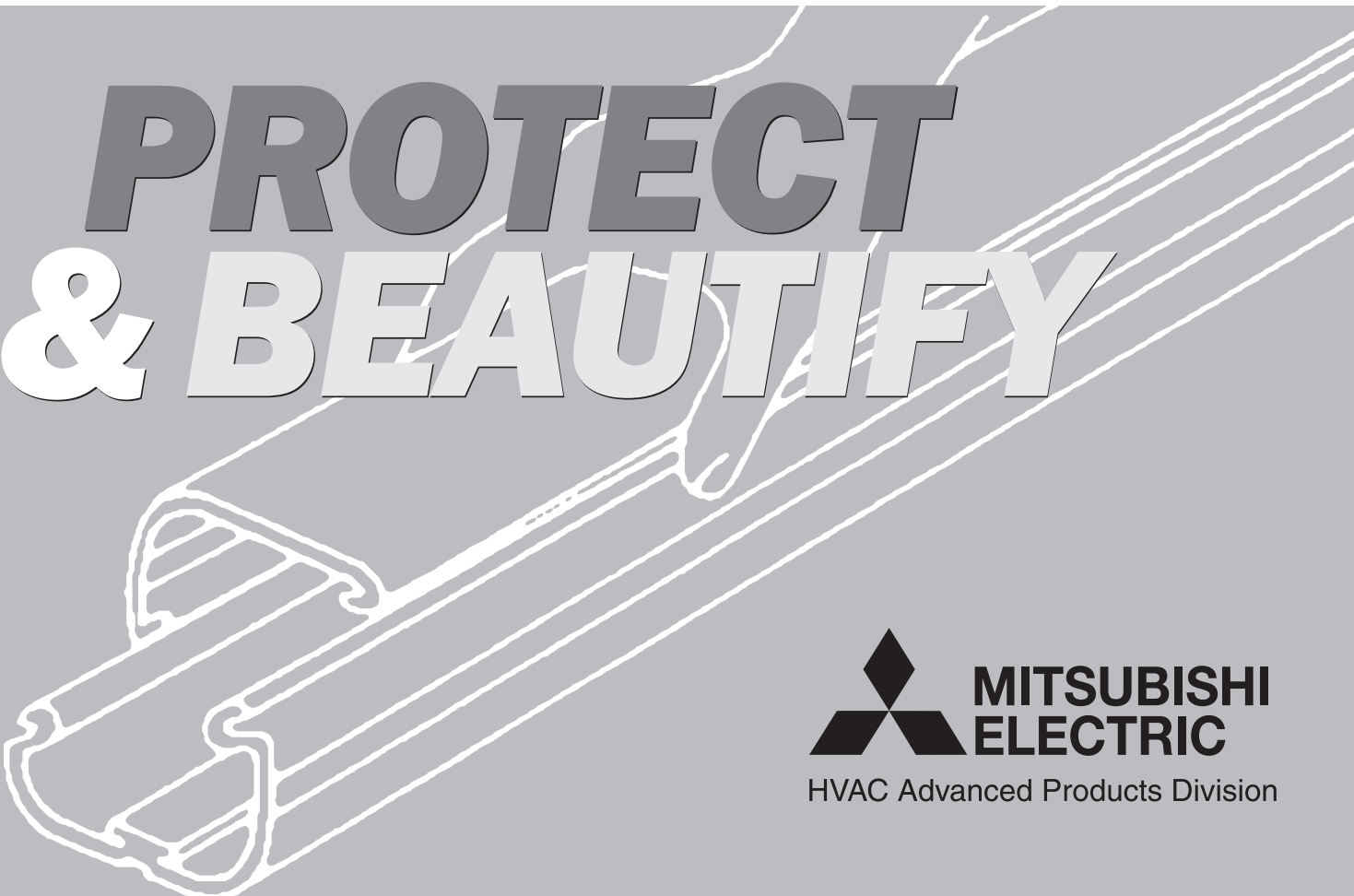
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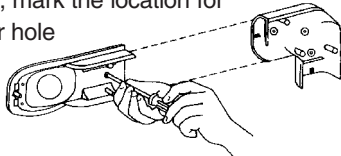
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Step 2: Install Entry Fittings and Joint Bases

Most Line-Hide entry fittings and joints (including elbows) include a base and a cover. Once you've determined where your joints will be, install the bases. If you're installing on wood, simply position the base, and fasten it to the wall, using wood screws. Don't overtighten, or you'll risk cracking the plastic.

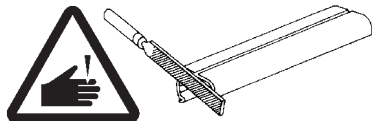
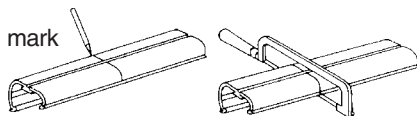
For installations on a brick wall, mark the location for each screw, and drill an anchor hole using a masonry bit; then use appropriate anchors and screws.



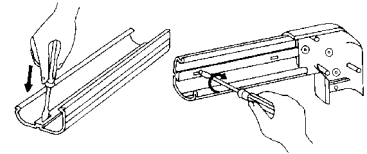
Step 3: Install Line Tube Base

Measure the distance between the molded stops of each joint base, and determine the length of tube needed. Line-Hide Line Tube is manufactured in six-and-one-half-foot (two-meter) lengths so some straight runs are fabricated using two or more lengths of tube and a socket/coupling.

To **cut** tube, measure and mark the appropriate length; then draw a perpendicular guideline across the tube. Use a hacksaw to cut the tube along the line, and then use a file to smooth the cut edge.



To **attach** the Line Tube base to the wall, first use the tip of a screwdriver to make a hole in the central rib of the base (thin spots

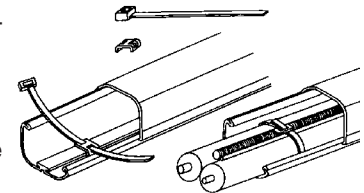


are moulded in to accommodate installation). Then put a screw through the hole in the tube, and tighten it to the wall. Be careful not to overtighten, for you may distort the tube. For the smaller sizes (the 60 and 75 series), place screws approximately every twelve inches. For the larger sizes (the 100 and 140 series), use screws approximately every six inches.

Step 4: Install the Lineset

Unwind insulated refrigerant lines, and place into straight portion of the tube. When installing insulated refrigerant pipe into a corner, adjust the pipe to the shape of the joint, and gently bend the insulated refrigerant pipe without forcing it. Bending too quickly can cause kinks in insulated refrigerant pipe and can pinch drain pipe. Also try to avoid compressing the pipe insulation.

A Saddle Band (NV-S short or NV-L long) can be used to fasten the insulated refrigerant pipe, drain pipe, and electric cable together in the Line Tube. The *saddle* snaps to the central rib of the tube base.

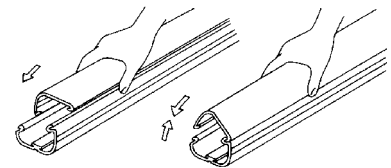


Thread the band through the saddle and around the piping and cable, and pull it tight. This procedure will help to keep the pipes and wiring in place.

As a general rule, use one saddle band for every three feet (one meter) of tube.

Step 5: Assemble the Line Tube

When the Lineset is in position, attach the tube cover to the base. Slip the lip on the short



edge of the cover into the trough on the high edge of the base. Then squeeze the short end of the base while pushing the long edge of the cover inward so that the lip and the trough engage.

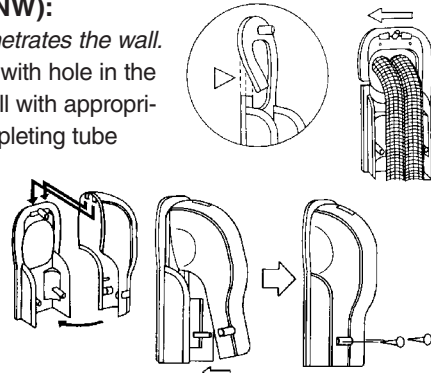
Step 6: Assemble the Joints

With the Line Tube completely assembled, return to each joint, and complete assembly. Position the cover of each joint over its base; line up the holes; then secure cover to bases with the stainless steel screws provided.

Installation Instructions for Specific Items

Wall Cover Inlet (NW):

Use where piping penetrates the wall. Align wall cover base with hole in the wall, and fasten to wall with appropriate screws. After completing tube assembly, push the tube downward (in the direction of the arrows) after aligning the base with the stopper built-in to the top portion of wall cover. This process will temporarily fasten wall cover.



Simple Wall Cover (NY):

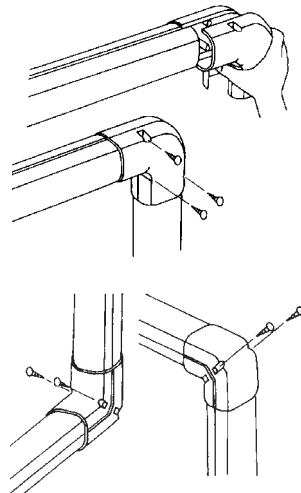
One-piece inlet is used where refrigerant piping penetrates the building wall.

Locate cover over Lineset, and mark mounting holes. Mount and secure Line Tube to wall. Carefully bend refrigerant tubing, drain and/or wiring into Line Tube. Place a bead of caulk on the wall cover flange. Place Simple Wall Cover over wall opening, and secure with appropriate screws and anchors.

Elbows – 90 degree horizontal (NE) and vertical (NC), 45 degree horizontal (NM) and vertical (NU), and universal horizontal (NX) and vertical (NZ):

Use where piping from the outdoor unit rises vertically or turns horizontally along the wall.

Position the elbow base on the wall where it will be fastened, and attach to the wall with appropriate screws. After installing tube, align the elbow cover to the elbow base, and attach with the stainless steel screws provided.



All vertical elbows — NC, NU, NZ — are reversible for use in both inside and outside corner applications. Cover screws can be inserted in either direction required.

T-Joint (NT):

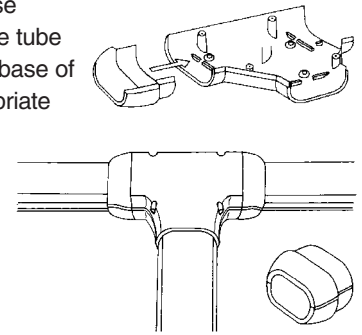
Use where piping branches off.

To change tube size, use the appropriate adapter set.

Contents of Accessory Adapter Sets

NT-75	75mm-60mm adapter	2 sets
NT-100	100mm-60mm adapter	2 sets
	100mm-75mm adapter	2 sets
NT-140	140mm-100mm adapter	2 sets

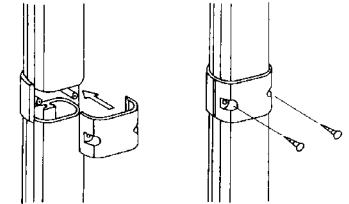
Fit the accessory adapter base appropriate for the proper size tube into the T-Joint base. Fasten base of T-Joint to wall with the appropriate screws. After tube base is installed and the lineset positioned, and the tube cover snapped on, attach the T-Joint cover to the T-Joint base with the stainless steel screws provided.



Socket/Coupling (NS):

Use to lengthen and extend tubes and to prevent tube cover from sliding.

Mark the length of the tube; then position the socket base so that the tube will abut the molded plastic stop of the socket; then attach the socket to the wall with appropriate screws. After installing tube, align cover with holes in socket base, and fasten with the stainless steel screws provided.



Variant Socket/Reducer (NJ):

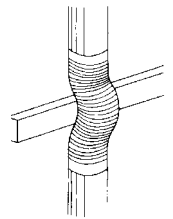
Use to connect Line Tubes of different sizes.

Before attaching base to wall, determine that the converter corresponds to the varying tube sizes you'll be joining and that it is oriented properly on the wall. Then attach with the appropriate screws. Locate Line Tubes, and install covers. Place socket covers over base; align holes, and fasten with stainless steel screws provided.

Flexible Joint (NF):

Use where piping bends over protrusion (such as side molding) on wall.

If your installation requires the use of flexible joint, **INSTALL IT FIRST. Flexible joints are not split.** Simply slide the flexible joint over the piping, and secure it in place.

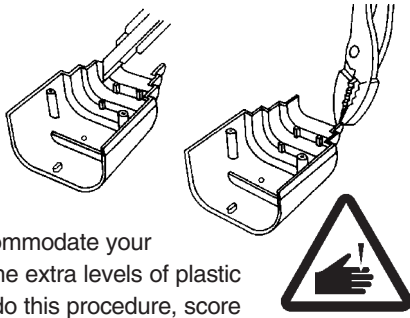


To connect flexible joint to Line Tube, slide end of the flexible joint into the end of tube base, and fasten it with appropriate screws. To help ensure a tight fit, compress the bellows of the flexible joint. After the flexible joint is released, it will expand against the tube to make a tight, strong connection. When the assembly is complete, snap the tube cover onto the tube base so that the end of the flexible joint is concealed.

End Socket (NR):

Use to accommodate various lineset combinations.

Before attaching the end socket, determine which of the various openings will best accommodate your lineset. Then remove the extra levels of plastic on the end socket. To do this procedure, score the plastic with a utility knife (make sure you're wearing gloves) where you want to break it. Then, holding the end socket in one hand, use pliers to grip the excess plastic, and snap it off (make sure you're wearing safety goggles, as the plastic can break in unexpected ways). Use a file to smooth any rough edges.



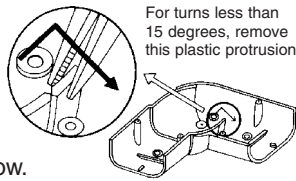
NOTE: Attempting to snap the plastic without scoring it first will likely crack the end socket.

With the excess plastic removed, attach the base with screws; install the tube, and attach the cover. See the socket/coupling instructions for more details.

Universal Elbow, Horizontal (NX) and Vertical (NZ):

Use to change duct direction at an angle between 45 and 90 degrees.

When elbow is angled at 0 to 15 degrees, break off the protrusion inside the universal elbow using pliers (as shown at right) in the direction of the arrow.



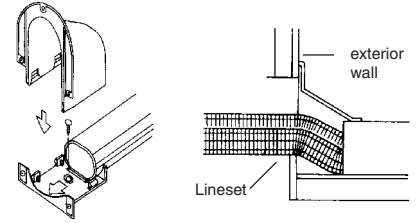
WARNING: Flying fragments of plastic may pose a hazard when breaking off the protrusion inside the universal elbow. Be sure to wear safety glasses and gloves, and make sure that others in the area are wearing appropriate safety gear as well.



Corner Cap/Soffit Entry Fitting (NA):

Use where piping comes through ceiling, wall, etc.

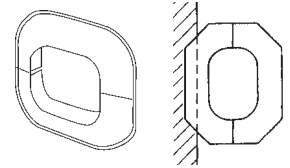
With Line Tube in place, locate the bottom of the corner cap against the wall, and attach with appropriate screws. Then snap the top portion to the bottom portion and attach it to the base with the stainless steel screws provided.



Wall Entry Fitting (NK):

Use to provide a good seal where tube comes through wall.

Simply fit the bottom and top portions around the inlet hole in the wall, and attach with appropriate screws. Wall Entry Fitting may be trimmed to fit by scoring the bottom portion, then snapping off the excess plastic.



Caulking

To help ensure that the lineset remains free of corrosion and mildew resulting from excess moisture, use caulking to seal around the Line-Hide product where the lineset exits and enters the wall.

LINE-HIDE™
Lineset Cover System



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