

CEDAR *Suite* PLANS



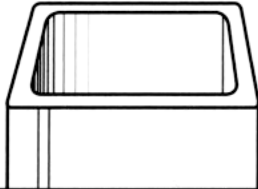
No. 047797-252

AR SUITE PLANS

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Materials List

The Cedar Suite is designed to accommodate either a 2" square pole, shown with accessories on the back cover, or a 1¼" galvanized pole available at your local hardware. The parts needed to be purchased for the 2" square pole are listed below, as well as the tools needed. For the 1¼" galvanized pole materials list, see page 2.



2" SQUARE ALUMINUM POLE

Cedar Wood List

Can be purchased at your local lumber store.

Qty.	Size
1	1 x 10 x 10' Cedar
1	1 x 12 x 8' Cedar
1	1 x 12 x 10' Cedar
2	1 x 4 x 8' Cedar

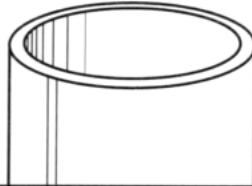
Hardware List

Qty.	Item Description
1 lb.	#8 x 2" Deck Screws
4	2" Hinge
4	Draw Latch or 1½" Hook & Eye
2	3" x ⅝" Mending Brace
2	6" x ¾" Mending Brace
1	3" Garage Door Pulley
1	5/16 x 4½" Hex Cap Screw (Machine Bolt)
1	¼ x 4½" Hex Cap Screw (Machine Bolt)
4	¼ x 3" Hex Cap Screw (Machine Bolt)
1	5/16" Stop Nut
3	¼" Stop Nut
2	¼" Hex Nut
8	5/16 Flat Washer
2	5/16 x ¾" Steel Spacer (ID)
2	¼ x 1" Steel Spacer (ID)
1	Winch
24'	⅛" Cable
1	⅛" Wire Rope Clip
1	⅛" Cable Stop
5	Bags of Concrete Mix
¼ qt.	White Paint

TOOLS NEEDED FOR 2" SQ. OR 1¼" ROUND

- Contractors Square
- Skill Saw or Jig Saw
- Drill
- 3½" Driver for drill to match the type of screws
- 2" Hole Saw (For round entrances, see page 4, step 5)
- 1-3/16 Hole Saw (For round entrances, see page 4, step 6)
- 1¾" Hole Saw (For round pole, see page 5, step 9)
- ⅛" Drill Bit
- ¼" Drill Bit (For round pole)
- 9-3/2 Drill Bit
- 5/16 Drill Bit
- ⅜" Drill Bit
- 7/16 Wrenches
- ½" Wrenches
- Pipe Wrenches (For round pole)
- Pliers

Materials List



1¼" ROUND GALVANIZED POLE			
Cedar Wood List <i>Can be purchased at your local lumber store.</i>			
Qty.	Size		
1	1 x 10 x 10' Cedar		
1	1 x 12 x 8' Cedar		
1	1 x 12 x 10' Cedar		
2	1 x 4 x 8' Cedar		
Hardware List			
Qty.	Item Description	Qty.	Item Description
1 lb.	#8 x 2" Deck Screws	2	¼" Hex Nut
4	2" Hinge	2	10-24 Hex Nut
4	Draw Latch or 1½" Hook & Eye	8	⅜" Flat Washer
2	3" x ⅝" Mending Brace	2	5/16 x ½" Steel Spacer (ID)
2	6" x ¾" Mending Brace	1	¼ x ¾" Steel Spacer (ID)
1	3" Garage Door Pulley	1	¼ x 1" Steel Spacer (ID)
1	5/16 x 4" Hex Cap Screw (Machine Bolt)	1	Winch
1	¼ x 4" Hex Cap Screw (Machine Bolt)	24'	⅛" Cable
4	¼ x 2½" Hex Cap Screw (Machine Bolt)	1	⅛" Wire Rope Clip
2	10-24 x 2" Machine Screw	1	⅛" Cable Stop
1	5/16" Stop Nut	5	Bags of Concrete Mix
3	¼" Stop Nut	¼ qt.	White Paint
Pole List			
1	1¼ x 48" sch 40 Galvanized Pipe threaded on one end		
1	1¼ x 120" sch 40 Galvanized Pipe. <i>For easier installation have only one end threaded.</i>		
1	1¼ Galvanized Coupler		
1	1 x 12" sch 40 Black Pipe		
1	1 x 36" sch 40 Black Pipe		
1	¾ x 36" sch 40 Black Pipe		

CUTTING THE LUMBER

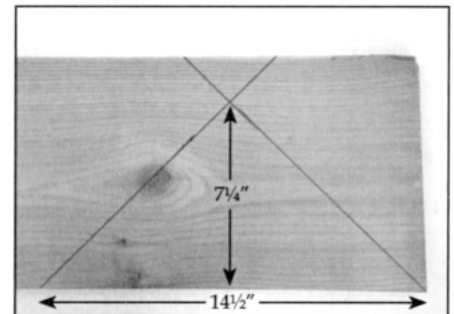
STEP 1: Cut the straight wood pieces from the lumber you have purchased. NOTE: The measurements are for lumber that is $\frac{3}{4}$ " thick. You may notice a slight variation on how the pieces fit if the wood you are using is thinner or thicker. The following pieces are cut at 90 degrees. Cut the quantity and dimensions listed below. Keep any extra wood from the 1 x 4 x 8' for later use.

From the two 1 x 4 x 8'	From the one 1 x 10 x 10'	From the one 1 x 12 x 8'	From the one 1 x 12 x 10'
3 at 18½"	4 at 19½"	2 at 25½"	2 at 18"
6 at 11¼"		2 at 19½"	2 at 17"
6 at 9⅞"			4 at 6"

STEP 2: Cut 2 gable pieces from the remaining 1 x 10 x 10'. Use your contractors square to mark the 45 degree angle.

STEP 3: Cut 2 pulley assembly pieces from the remaining 1 x 10 x 10'. Use your contractors square to mark the 45 degree angle. You will be able to fit both pieces at the width of the board.

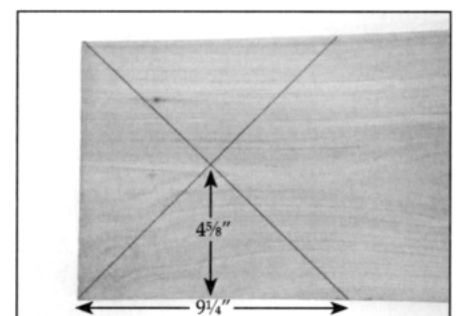
STEP 4: Cut a $\frac{3}{4}$ " strip off an edge of one roof piece (11¼" x 25½"). This will keep the roof width equal when the two pieces are adjoined.



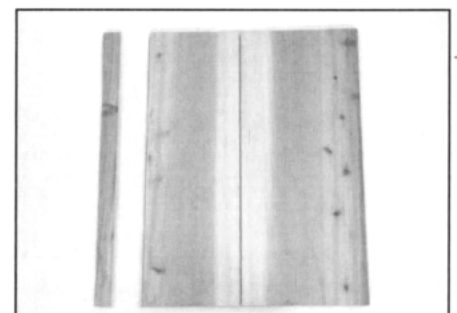
Step 2

When you have completed the above steps, you should have the following sizes and quantities listed below. There is a name behind each size to identify where the pieces will be used. We will refer to these sizes and names through out the instructions.

Qty.	Size	Name
3	3½ x 18½	Back Side Porches
6	3½ x 11¼	Side Porches
6	3½ x 9⅞	Door Porches
2	9¼ x 19½	Back Panels
2	9¼ x 19½	Doors
1	11¼ x 25½	Wide Roof
1	10½ x 25½	Narrow Roof
2	11¼ x 19½	Right and Left Side
2	11¼ x 18	Dividers
2	11¼ x 17	Top and Bottom
4	11¼ x 6	Compartment Floors
2	14½ x 7¼ (triangle)	Gable Ends
2	9¼ x 4⅝ (triangle)	Pulley Assembly



Step 3



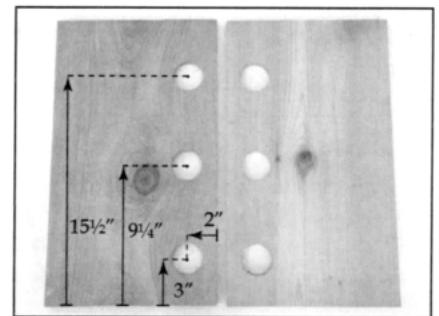
Step 4

PREPARING THE WOOD BEFORE ASSEMBLY

ENTRANCES

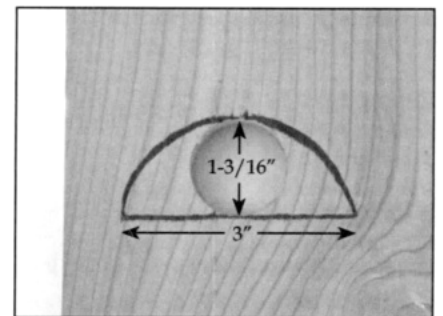
The wood you have purchased may be rough sawn on the one side. You may turn the rough side either inward or outward. The Cedar Suite is designed to accommodate most any entrance design for the bird to enter the compartments. If you choose round, complete step 5, skip steps 6 and 7. If you choose crescent, we have two options on how to make a crescent design. Skip step 5, complete either step 6 or 7. If you choose a design of your choice, skip steps 5 and 6, complete step 7.

STEP 5: For round entrances, follow this step. Using a 2" hole saw, drill three round entrance holes per right and left sides ($11\frac{1}{4} \times 19\frac{1}{2}$). The locations are marked in the photo. You will want to drill the holes into the sides as a pair so the rough sawn side of the wood is turned either inward or outward on both sides.



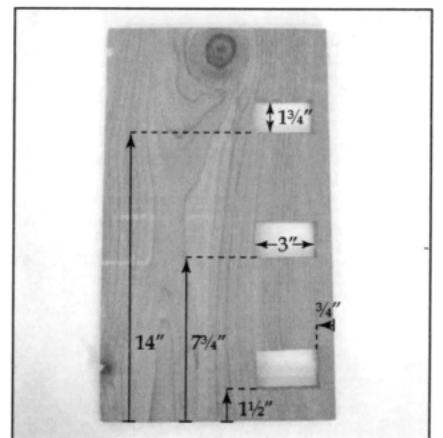
Step 5

STEP 6: For crescent entrances without using a template, follow this step. Using a $1\frac{3}{16}$ " hole saw, drill three round holes per right and left sides ($11\frac{1}{4} \times 19\frac{1}{2}$). You will want to drill the holes into the sides as a pair so the rough sawn side of the wood is turned either inward or outward on both sides. The bottom of the hole, which is also the bottom of the entrance, should be at the height which is marked in the photo of step 7. Once the holes are drilled, mark a straight line across the bottom 3" wide. Draw an arch from the top of the hole to the end of the 3" line. Cut out the crescent entrance using a jig saw. It is important the height be $1\frac{3}{16}$ ". If the height is over $1\frac{3}{16}$ " you will lose some of the starling resistance. If the height becomes too short, it may obstruct the martin's ability to enter. We recommend cutting the arch a little small then using a file to enlarge to a $1\frac{3}{16}$ " opening.



Step 6

STEP 7: For crescent templates or templates of your choice, follow this step. Crescent templates are available on the back cover. Cutting a rectangle hole and using a template will not require you to be so exact with the entrance measurements. The rectangle holes shown in the photo will accommodate most entrance designs. Mark three rectangle holes onto the sides ($11\frac{1}{4} \times 19\frac{1}{2}$) with the measurements shown in the photo. If you chose an entrance design other than crescent, check to make sure the rectangle hole is equal to or larger than your entrance design. You may need to adjust the rectangle size to accommodate your entrance. You will want to mark the holes onto the sides as a pair so the rough sawn side of the wood is turned either inward or outward on both sides. Drill a $\frac{3}{8}$ " to $\frac{1}{2}$ " hole inside the rectangle at opposite corners. Insert the jig saw blade into either drilled hole and cut out the rectangle. Repeat this with the remaining 5 rectangles. After cutting out the rectangles, attach the entrance templates over the rectangle cutout. If using crescent designs, keep the bottom of the entrance flush with the bottom of the cutout.



Step 7

CEDAR

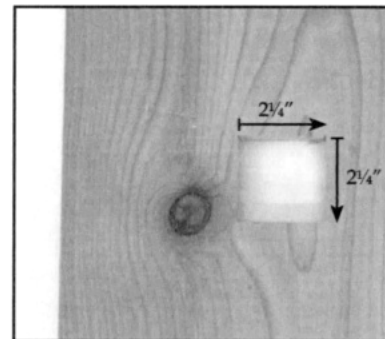
Suite

PLANS

HOLES FOR THE POLE

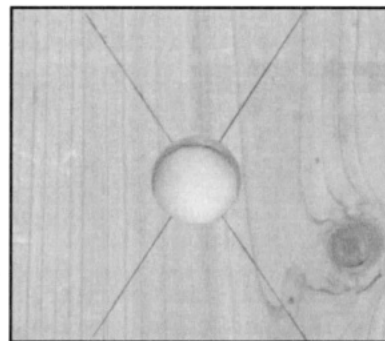
The Cedar Suite is designed to accommodate either a 2" square aluminum pole, available on the back cover, or a 1¼" round galvanized pole, purchased at your local hardware. If you choose the 2" square pole, complete step 8 and skip step 9. If you choose the 1¼" round pole skip step 8 and complete step 9.

STEP 8: Draw an X at the center of the top and bottom (11¼" x 17") pieces by using a straight edge from opposite corners and marking at the center. The middle of this X is the center of the 2¼" square hole. From the middle, measure outward 1⅝" for all four sides. Use your contractors square to mark a square. Drill a ⅜" to ½" hole inside the square at opposite corners. Insert the jig saw blade into either drilled hole and cut out the square.



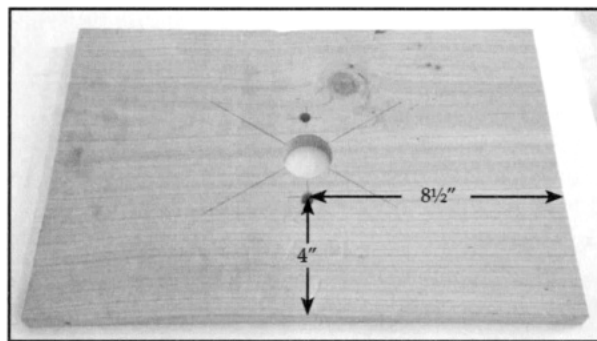
Step 8

STEP 9: Draw an X at the center of the top or bottom (11¼" x 17") pieces by using a straight edge from opposite corners and marking at the center. In the middle of this X, drill a round hole using a 1¾" hole saw. Repeat this step on the remaining top or bottom piece.



Step 9

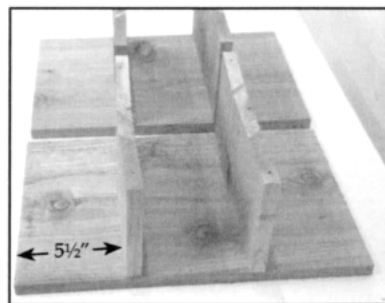
STEP 10: Drill the cable holes into the top and bottom (11¼" x 17") pieces by using a ⅜" drill bit. The measurements are shown in the photo.



Step 10

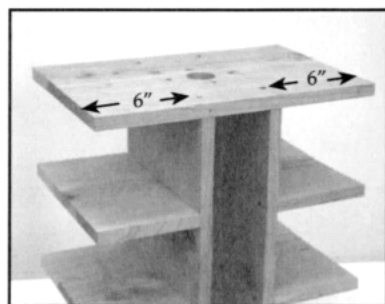
ASSEMBLY OF THE HOUSE

STEP 11: You may turn the rough sawn side either in towards the compartment or outward. Measure 5½" in from both ends and draw a horizontal line across the inward side of both dividers (11¼" x 18"). Fasten with screws two compartment floors (11¼" x 6") to each divider, making sure the edges of the floors and dividers are flush. It should measure approximately 5½" for the center compartment height.



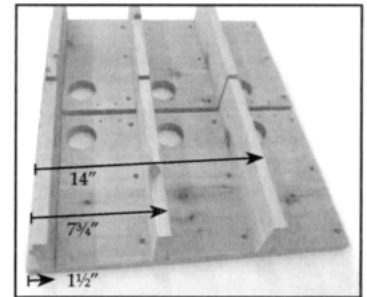
Step 11

STEP 12: Measure 6" in from both ends and draw a horizontal line across the inward side of both top and bottom (11¼" x 17") pieces. Lay dividers onto their side to fasten the top and bottom pieces with screws. It should measure approximately 3½" between the two dividers. It will make the assembly easier in the steps following, if after completing this step, you can lay this assembled part on its side and there is no wobble. If there is a wobble, loosen the screws which will allow the pieces to lay flat then retighten.



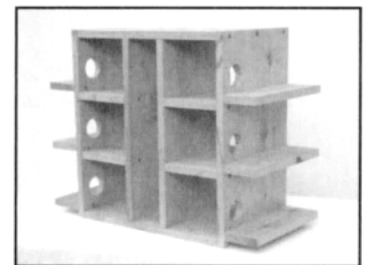
Step 12

STEP 13: On outward side of both right and left sides ($11\frac{1}{4}" \times 19\frac{1}{2}"$), draw a horizontal line from the bottom up $1\frac{1}{2}"$ again at $7\frac{3}{4}"$ and $14"$. Fasten with screws three side porches ($3\frac{1}{2}" \times 11\frac{1}{4}"$) per right and left side. The porches are fastened below the line and should not obstruct the entrances. If using crescent entrances, porches may be flush with the bottom of the entrance.



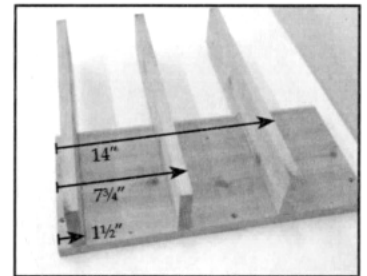
Step 13

STEP 14: In the following steps, the partly assembled house will be referred to as the body. Turn the body so the top is upward, then with screws fasten the sides (porches attached) to the body. Predrill with $\frac{1}{8}"$ drill bit along the top and bottom ends to prevent the wood from splitting making sure the ends are flush. Also place screws through the sides and into the compartment floors. After this step is complete, all entrances on your right and left sides need to be towards the front of the body.



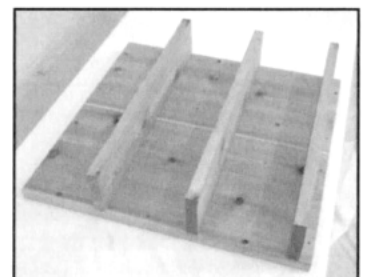
Step 14

STEP 15: On outward side of both back panels ($9\frac{1}{4}" \times 19\frac{1}{2}"$), draw a horizontal line from the bottom up $1\frac{1}{2}"$ again at $7\frac{3}{4}"$ and $14"$. To one back panel, fasten below the line, three back side porches ($3\frac{1}{2}" \times 18\frac{1}{2}"$) with one screw, per porch, towards the outside edge. One screw will allow you to pivot the porch in the next step.



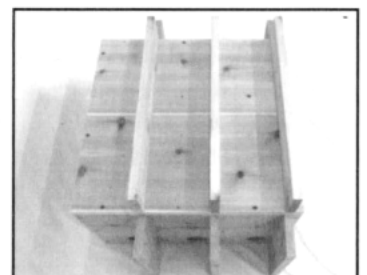
Step 15

STEP 16: Align, side by side, the second back panel ($9\frac{1}{4}" \times 19\frac{1}{2}"$) to the one in step 15 making sure the ends are flush. Pivot the porches to align with the horizontal lines. Put in one screw per porch at the outside corner. Put in two additional screws per porch towards the adjoining edges.



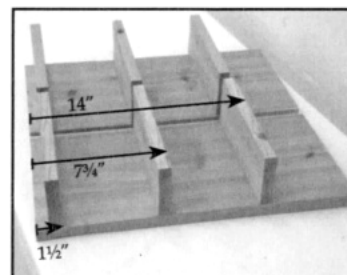
Step 16

STEP 17: In step 14, all entrances on both right and left sides are to be towards the front of the body. The back is the side furthest away from the entrances. Turn the body so the top is upward, with screws fasten the back panels (porches attached) to the back side of the body. Predrill with $\frac{1}{8}"$ drill bit along the top and bottom ends to prevent the wood from splitting making sure the ends and sides are flush. It may be because of the variation in wood thickness, if the ends and sides are not flush. Also place screws through the back panels and into the vertical dividers at $7\frac{1}{8}"$ in from both edges.



Step 17

STEP 18: Lay both doors ($9\frac{1}{4}" \times 19\frac{1}{2}"$) side by side on the front of Body. You will want both door edges to be flush along the right and left sides. Preferably there will be a small space, in the middle, of the two door panels. If the center is against each other and the right and left edges are beyond the sides, trim one edge off of either the right or left door. On outward side of both doors, draw a horizontal line from the bottom up $1\frac{1}{2}"$ again at $7\frac{3}{4}"$ and $14"$. Fasten with screws, three door porches ($3\frac{1}{2}" \times 9\frac{1}{8}"$) to the right hand door, keeping the porches flush with right edge of door. Fasten three door porches to the left hand door, keeping the porches flush with the left edge of door. In the middle, there will be a small space between the two door porches which will allow the door to open easily.



Step 18

CEDAR

Suite

PLANS

STEP 19: Mark the hinge location on both right and left sides 1½" down from top and 4" up from bottom. Lay the doors against the body and fasten the four hinges, at the marked locations, using ¾" screws.

STEP 20: Lay the house on its back to mark the top and bottom end of each door ¾" out from the center. Fasten the two top and two bottom draw latch catches using the ¾" screws. If using hook and eye, fasten the four eyes at the same location and skip step 21, continue with step 22.

STEP 21: Hook the draw latch into the catch and push downward with your thumb. Mark the location of the bottom screw hole. Open the latch and fasten with ¾" screw where the bottom hole was marked. Close the latch to check on the tightness. Loosen the screw if you need to adjust the latch other wise completely open the latch to fasten the top screw. Repeat this step for the remaining three latches and skip step 22, continue with step 23.

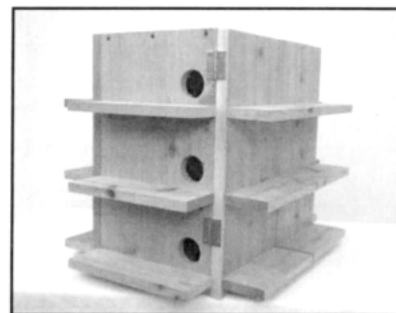
STEP 22: For hook and eye, place the hook into the eye and press down on the hook screw to mark the location. Remove the hook and screw into the marked location. Use a pair of pliers if needed to adjust the tightness of the hook. Repeat this step for the remaining 3 eyes.

STEP 23: Predrill the wide roof (11¼" x 25½") along one edge.

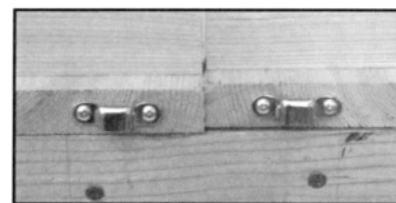
STEP 24: With screws, fasten the narrow roof (10½" x 25½") to the underside of the pre-drilled wide roof edge, keeping the roof edges flush.

STEP 25: Mark and draw a line on the underside of roof ¾" in from both ends. On the outside of the marked line, fasten with screws the gable ends making sure they are seated into the peak of the roof. You should have approximately 18¾" on the inside of the gable ends.

HURRAY! You have completed the assembly of your Cedar Suite. You are now ready to paint. Purple martins are more attracted to white housing so we do recommend painting the house white. You can use your artistic touches in trimming the house with your very own touch. As the paint is drying we continue by preparing the pole system. If you are using a 1¼" galvanized pole, continue at page 9.



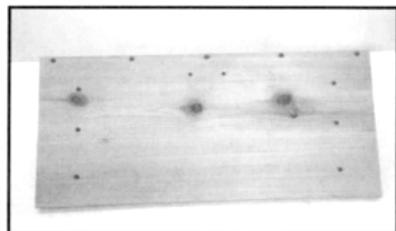
Step 19



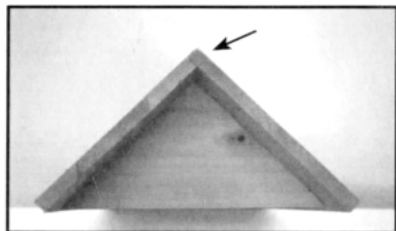
Step 20



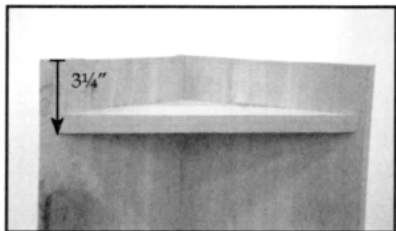
Step 21



Step 23



Step 24



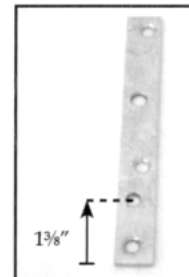
Step 25

PREPARING FOR 2" SQUARE ALUMINUM POLE

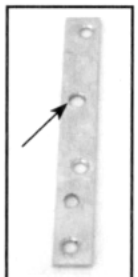
LOCATION: Place the house where you can enjoy watching and hearing the martins. Your martin house should be as far away from trees as possible. An average minimum distance of 40 feet away from trees is required and no closer than 25 feet or no further than 120 feet from human housing. Martins like to be close to people. Martins like wide open flight paths around their housing. Think of your martin house as being an airport and the martin as the airplane. Martins prefer to have two or more runways leading to their house.

STEP 26: Remove the 1½" square steel ground stake from the aluminum pole. The painted end, which has a piece of welded angle along the side is the end which is to be above ground. Dig a square hole 14" wide, 14" long and 24" deep. Standing the ground stake in the center of your hole, fill the hole with wet cement to ground level. Be sure the ground stake is plumb and leave 24" above the cement. Also fill the inside of the ground stake with cement, to prevent water from accumulating and freezing inside. The pole will slide over the ground stake later, so be sure to wipe clean the ground stake of any excess cement. The dimensions above require 5 bags of dry cement mix.

STEP 27: On both 6" mending braces, there needs to be a new 9/32" hole drilled. Align the new hole vertically above the factory hole at 1⅜" in from the end. When finished, both 6" mending braces should be duplicates.



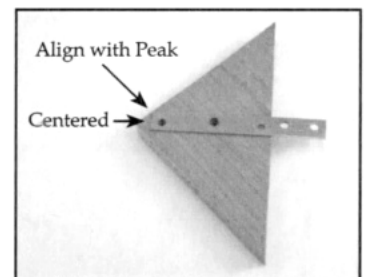
Step 27



Step 28

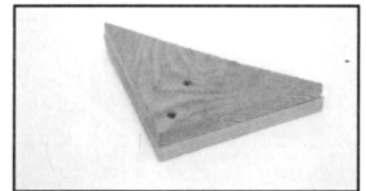
STEP 28: The second hole down from the top of both 6" mending braces needs to be enlarged to a 5/16" hole.

STEP 29: Position 6" mending brace on the pulley assembly triangle. Align top of brace with the peak making sure it is centered from side to side along the bottom. Mark the location of the two top holes. Remove the brace and drill two 5/16" holes at the locations marked.



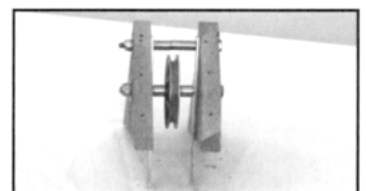
Step 29

STEP 30: Position the first pulley assembly triangle (the one used in step 29) on top of the second triangle aligning the peak and sides. If there is a variation in size, make sure the peak and sides are aligned. Mark and drill the two mending brace holes into the second triangle also using 5/16" bit.



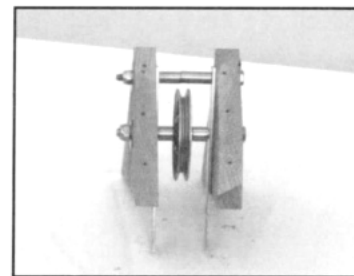
Step 30

STEP 31: Position both 6" mending braces on the pulley assembly triangles aligning the holes. Slide a ⅜" flat washer onto a 5/16" x 4½" machine bolt and insert the bolt into the bottom hole of the triangle and through the mending brace. The two mending braces will be on the inside of the pulley assembly when finished. Slide a 5/16" x ¾" spacer onto the bolt then the 3" garage pulley. Next slide another 5/16" x ¾" spacer on the other side of pulley before inserting the bolt through the second bending brace and out through the second pulley triangle. Slide another ⅜" flat washer onto the end of the bolt before threading on a stop nut.



Step 31

STEP 32: Slide a $\frac{3}{8}$ " flat washer onto a $\frac{1}{4}$ " x $4\frac{1}{2}$ " full threaded hex bolt and insert the bolt into the top hole of the triangle and through the mending brace. Slide two $\frac{1}{4}$ " x 1" spacers onto the bolt before inserting the bolt through the second bending brace and out through the second pulley triangle. Slide another $\frac{3}{8}$ " flat washer onto the end of the bolt before threading on a stop nut.



Step 32

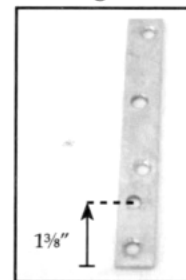
STEP 33: Snug up the $\frac{1}{4}$ " and $\frac{5}{16}$ " stop nuts. Do not completely tighten or it may become more difficult to slide over the pole. It will be tightened in later steps. Skip steps 34 through 50 and continue at step 51.

PREPARING FOR A $1\frac{1}{4}$ " GALVANIZED POLE

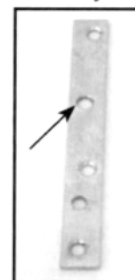
LOCATION: Place the house where you can enjoy watching and hearing the martins. Your martin house should be as far away from trees as possible. An average minimum distance of 40 feet away from trees is required and no closer than 25 feet or no further than 120 feet from human housing. Martins like to be close to people. Martins like wide open flight paths around their housing. Think of your martin house as being an airport and the martin as the airplane. Martins prefer to have two or more runways leading to their house.

STEP 34: Take the $\frac{3}{4}$ " x 36" black pipe and slide it inside the 1" x 36" black pipe. Sliding the two pipes into one another is for extra strength. Dig a square hole 14" wide, 14" long and 24" deep. Standing the ground stake in the center of your hole, fill the hole with wet premixed cement to ground level. Be sure the ground stake is plumb and leave 12" above the cement. Also fill the inside of the ground stake with cement, to prevent water from accumulating and freezing inside. The pole will slide over the ground stake later, so be sure to wipe clean the ground stake of any excess cement. The dimensions above require 5 bags of dry cement mix.

STEP 35: On both 6" mending braces, there needs to be a new $\frac{9}{32}$ " hole drilled. Align the new hole vertically above the factory hole at $1\frac{3}{8}$ " in from the end. When finished, both 6" mending braces should be duplicates.



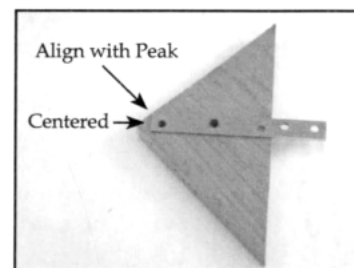
Step 35



Step 36

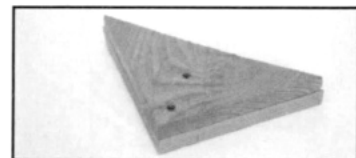
STEP 36: The second hole down from the top of both 6" mending braces needs to be enlarged to a $\frac{5}{16}$ " hole.

STEP 37: Position 6" mending brace on the pulley assembly triangle. Align top of brace with the peak making sure it is centered from side to side along the bottom. Mark the location of the two top holes. Remove the brace and drill two $\frac{5}{16}$ " holes at the locations marked.



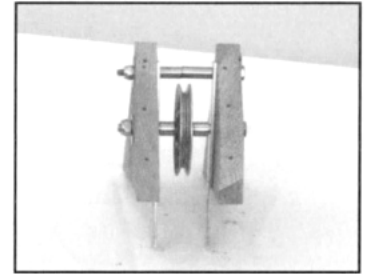
Step 37

STEP 38: Position the first pulley assembly triangle (the one used in step 37) on top of the second triangle aligning the peak and sides. If there is a variation in size, make sure the peak and sides are aligned. Mark and drill the two mending brace holes into the second triangle also using $\frac{5}{16}$ " bit.



Step 38

STEP 39: Position both 6" mending brace on the pulley assembly triangles aligning the holes. Slide a $\frac{3}{8}$ " flat washer onto a $\frac{5}{16}$ " x 4" machine bolt and insert the bolt into the bottom hole of the triangle and through the mending brace. The two mending braces will be on the inside of the pulley assembly when finished. Slide a $\frac{5}{16}$ " x $\frac{1}{2}$ " spacer onto the bolt then the 3" garage pulley. Next slide another $\frac{5}{16}$ " x $\frac{1}{2}$ " spacer on the other side of pulley before inserting the bolt through the second mending brace and out through the second pulley triangle. Slide another $\frac{3}{8}$ " flat washer onto the end of the bolt before threading on a stop nut.

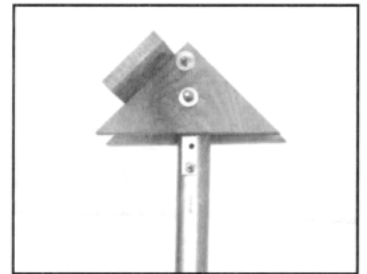


Step 39

STEP 40: Slide a $\frac{3}{8}$ " flat washer onto a $\frac{1}{4}$ " x 4" hex cap screw and insert the bolt into the top hole of the triangle and through the mending brace. Slide two $\frac{1}{4}$ " x $\frac{3}{4}$ " spacers onto the bolt before inserting the bolt through the second mending brace and out through the second pulley triangle. Slide another $\frac{3}{8}$ " flat washer onto the end of the bolt before threading on a stop nut.

STEP 41: Snug up the $\frac{1}{4}$ " and $\frac{5}{16}$ " stop nuts. Do not completely tighten or it may become more difficult to slide over the pole. It will be tightened in later steps.

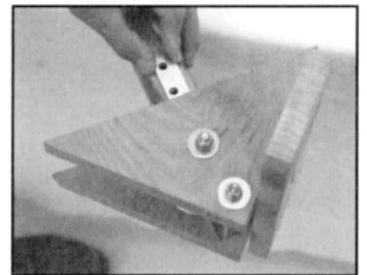
STEP 42: Attach a small piece of extra wood from the 1" x 4" board on top of both triangles. This extra wood keeps the pulley assembly squared but will be removed later.



Step 42

STEP 43: At the unthreaded end of long $1\frac{1}{4}$ " pole section, drill a $\frac{9}{32}$ " hole located $1\frac{3}{4}$ " in from the end. Drill only through one side of the pipe.

STEP 44: Align the bottom mending brace hole from the pulley assembly with the $\frac{9}{32}$ " hole drilled into the pole. Keeping the pulley assembly perpendicular with the pole, mark the bottom mending brace hole located at the opposite side of the pole. Remove the pulley assembly and drill another $\frac{9}{32}$ " hole into the pole at the marked location.



Step 44

STEP 45: Align the pulley assembly with the two holes drilled into the pole. Insert a $2\frac{1}{2}$ " hex cap screw and finger tighten a $\frac{1}{4}$ " stop nut. Mark the location of the top brace hole on both sides of the pole and remove the nut, bolt and pulley assembly. Drill a $\frac{9}{32}$ " hole into both sides of pole, where marked, for the top holes.



Step 45

STEP 46: Remove the small extra piece attached to the pulley assembly in step 42.

STEP 47: Thread a $1\frac{1}{4}$ " galvanized coupler onto threaded end of 48" pole section.

STEP 48: For additional support, insert the 1" x 12" black pipe through the coupler and into the $1\frac{1}{4}$ " x 48" pole leaving 5" of black pipe exposed. Drill a $\frac{1}{4}$ " hole through both pole and support at $4\frac{1}{2}$ " in from the outer edge of coupler. Insert one 10-24 x 2" machine screw and secure with 10-24 hex nut.

STEP 49: At 6" in from the unthreaded end of 48" pole section, also drill a 1/4" hole through the pole. This hole will be used later for securing the ground stake.

STEP 50: On the 48" pole section, approximately 36" from the unthreaded end, drill on 9/32" hole through the pole for the winch. Drill a second hole, through the pole, the same distance apart as what the distance is between the bolt holes on the winch.

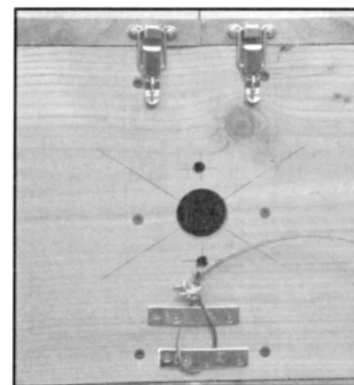
MOUNTING CEDAR SUITE ONTO EITHER A 2" SQUARE OR 1 1/4" ROUND POLE

STEP 51: Loop either end of the cable thru the 1/8" wire rope clip and tighten.



Step 51

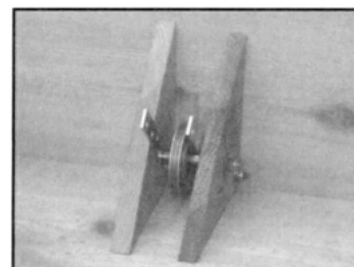
STEP 52: On the bottom of the house, opposite side of the door latches, fasten the cable with 3/4" screws and two 3" x 5/8" mending braces.



Step 52

STEP 53: Fasten the pulley assembly with screws to the underside of roof. Making sure it is centered between the two gable ends and seated into the roof peak.

STEP 54: Align the mending braces on pulley assembly, with roof attached, to the holes in the top section of pole. Insert 1/4" hex cap screws into each hole and make snug with 1/4" stop nuts. Do not completely tighten because the roof will be aligned later to the house.



Step 53

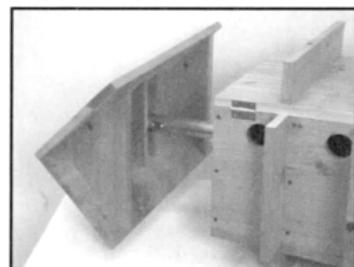
STEP 55: Rotate the pole, so the gable ends are aligned with the right and left side, and insert the pole, opposite end from roof, into the top and out through the bottom of the house.

STEP 56: Align the roof by sliding the pole until the house sets against the roof edges between the two gable ends. When the roof sits even from front to back, slide the pole outward enough to tighten the 1/4" stop nuts on the pole and also the pulley assembly stop nuts. You may want to double check the roof alignment after everything has been tightened before sliding the pole out of the house.



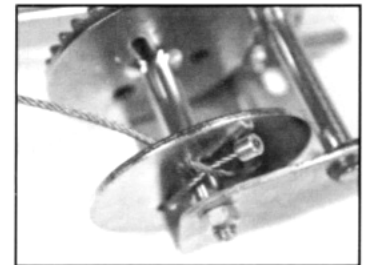
Step 54

STEP 57: Open the doors to feed the cable through the bottom and top cable holes. Reinsert the pole into the house and feed the cable through the pulley assembly between the top of the pulley and the 1/4" bolt. Feed the cable back through the top of the house out the bottom.



Step 55

- STEP 58: Complete this step for a 2" square aluminum pole otherwise go to step 59. Rotate the bottom pole section so the numbers are aligned. Slide the splice support of the top section into the bottom section. The two sections are held together by friction and gravity once erected.
- STEP 59: Complete this step for 1 1/4" pole. Thread the 1 1/4" coupler, located at the top of 48" pole section, onto the threaded end of top pole section. Tighten the pole assembly. When tightening, align the winch holes with the cable coming out through the bottom.
- STEP 60: On the same side of pole as what the cable is coming out through the bottom, mount the winch onto the pole using two 1/4" hex cap screws with 3/8" flat washers and 1/4" hex nuts.
- STEP 61: Wind the cable end around the side of the winch before inserting into a cable stop. Using a pliers or channel locks, pinch the cable stop enough to keep the stop on the cable. This stop is to keep the cable end from fraying.
- STEP 62: **IMPORTANT:** The cable must be seated in the pulley groove, located on top of the pole, or damage may be caused to the cable. Slide the martin house down the pole. Your martin house is now ready to be erected. The lower you keep the martin house on the pole when erecting, the easier it is to balance. Obtain assistance when erecting as working with objects above your head can cause serious injury. Set the martin house, with pole, vertically over the ground stake and slide the pole down to ground level.
- STEP 63: Complete this step for a 1 1/4" pole otherwise go to the next step. To keep the house from rotating, drill a 1/4" hole through the ground stake where the holes are located at on the bottom of the pole. It is easiest to drill one side of the ground stake at a time. After drilling, insert a 10-24 x 2" machine screw and secure with 10-24 hex nut.
- STEP 64: Turn the winch handle to raise and lower the martin house. Once the martin house reaches the top of the pole, the house will position itself between the gable ends. **DO NOT OVERTIGHTEN THE CABLE OR DAMAGE MAY OCCUR TO THE MARTIN HOUSE.**



Step 61

Contact PurpleMartin.org for optional parts availability.

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NestWatch
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