

Penetrating Mounts

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OVERVIEW

Mounting Tools

- Stud finder
- Marking tool
- Drill
- 7/32" drill bit
- Level
- 1/2" nut setter
- 1/2" socket wrench
- 7/16" wrench

Mounting Priority (Highest to Lowest)

- Direct to Wall
- Direct to Overhang
- Fascia, Angled Fascia
- Under Eave
- Direct to Brick
- Corner, Rail
- Non-Pen
- Versatile
- Patio
- Pole

Notes


- Key steps bolded
- All lags must be tightened snug plus a quarter turn

DIRECT TO WALL

Supplies

- **Two 3" lag screws**
- **Four 2" lag screws**
- **Silicone**


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Process	
<ol style="list-style-type: none">1. Locate and mark the stud2. Level footplate and mark center holes3. Pre-drill center holes with 7/32" drill bit4. Remove drill bit, attach 1/2" nut setter5. Fill two holes with silicone6. Apply silicone around four corner holes on the bottom of the footplate7. Drive 3" lags through center holes (99% in)8. Level the mast9. Tighten lags with 1/2" socket10. Drive 2" lags through four corner holes (99% in)11. Tighten corner lags with 1/2" socket12. Level mast and tighten hardware with 7/16" wrench13. Place dish on mast	

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DIRECT TO OVERHANG

Supplies
<ul style="list-style-type: none">• Two 3" lag screws• Four 2" lag screws• Pitch Patch

Process	
<ol style="list-style-type: none">1. Locate and mark the rafter over a non-living space2. Level the footplate and mark the center holes3. Pre-drill center holes with 7/32" drill bit4. Remove drill bit, attach 1/2" nut setter5. Fill two holes with pitch patch6. Apply pitch patch on the four corner holes on the bottom of the footplate7. Drive 3" lags through center holes (99% in)8. Level the mast9. Tighten lags with 1/2" socket10. Drive 2" lags through four corner holes (99% in)11. Tighten corner lags with 1/2" socket12. Level mast and tighten hardware with 7/16" wrench13. Place dish on mast	 <p data-bbox="820 1686 1453 1753">Figure 2 - Pitch Patch helps prevent water leaking and damage.</p>

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Figure 2 - Pitch Patch helps prevent water leaking and damage.

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FASCIA (ON GABLE)

Supplies

- Five/six 3" lag screws
- Silicone

Process

Assembly Process

1. Align footplate with fascia plate (pointed up)
2. Use supplied hardware to attach footplate
3. Remove pivot bolt from footplate

Installation Process

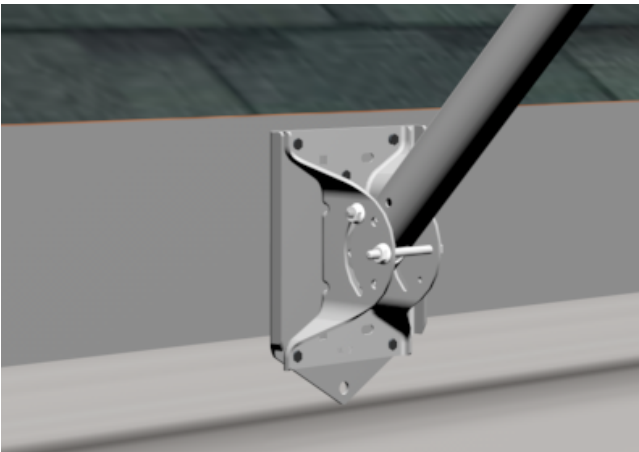
1. Locate and mark the rafter
2. Level footplate and mark the center hole
3. Pre-drill center hole with 7/32" drill bit
4. Remove drill bit, attach 1/2" nut setter
5. Fill hole with silicone
6. Drive 3" lag through center hole (99% in)
7. Remove nut setter, attach 7/32" drill bit
8. Re-attach pivot bolt with 7/16" wrench
9. Level the mast
10. Mark and pre-drill upper four holes
11. Remove drill bit, attach 1/2" nut setter
12. Fill holes with silicone
13. Drive 3" lags through upper four holes (99% in)
14. Tighten lags with 1/2" socket
15. Level mast and tighten hardware with 7/16" wrench
16. Place dish on mast



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FASCIA (ON HIP)

Penetrating Mounts

Supplies	
<ul style="list-style-type: none">• Two/three 3" lag screws• Two 2" lag screws• Silicone	
Process	
Assembly Process <ol style="list-style-type: none">1. Align footplate with fascia plate (pointed up)2. Use supplied hardware to attach footplate3. Remove pivot bolt from footplate	
Installation Process <ol style="list-style-type: none">1. Locate and mark the rafter2. Level footplate and mark the center hole3. Pre-drill center hole with 7/32" drill bit4. Remove drill bit, attach 1/2" nut setter5. Fill hole with silicone6. Drive 3" lag through center hole (99% in)7. Remove nut setter, attach 7/32" drill bit8. Re-attach pivot bolt with 7/16" wrench9. Level the mast10. Mark and pre-drill upper four holes11. Remove drill bit, attach 1/2" nut setter12. Fill holes with silicone13. Drive 3" lags through upper four holes (99% in)14. Tighten lags with 1/2" socket15. Level mast and tighten hardware with 7/16" wrench16. Place dish on mast	

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ANGLED FASCIA	
Supplies	
<ul style="list-style-type: none">• Two/three 3" lag screws• Two 2" lag screws• Silicone	

Process	
Assembly Process	

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1. Disassemble mast from footplate using the 13mm and 7/16" wrenches
2. Attach mast to angled fascia mount using the hardware removed from the footplate. Note: The angled fascia mount must be attached to the mast with the elongated slot on the bottom and two smaller holes on top
3. Tighten hardware

Installation Process

1. Find the exposed rafter
2. Mark the upper corner hole
3. Pre-drill the marked hole with 7/32" drill bit
4. Remove drill bit, attach 1/2" nut setter
5. Fill hole with silicone
6. Drive 2" lag (99% in)
7. Remove nut setter, attach 7/32" drill bit
8. Level the mast
9. Mark the remaining three holes
10. Pre-drill the remaining three holes
11. Remove drill bit, attach 1/2" nut setter
12. Fill holes with silicone
13. Drive remaining 2" lags (99% in)
14. Tighten lags with 1/2" socket
15. Place dish on mast



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UNDER EAVE

Supplies

- Four 2" lag screws
- Silicone

Process

Penetrating Mounts

Assembly Process

1. Disassemble mast from footplate using the 13mm and 7/16" wrenches
2. Attach mast to angled fascia mount using the hardware removed from the footplate. Note: The angled fascia mount must be attached to the mast with the elongated slot on the bottom and two smaller holes on top
3. Tighten hardware

Installation Process

1. Find and mark the rafter
2. Level the mount and mark top right corner hole
3. Apply silicone around four corner holes on the bottom of the mount
4. Drive 2" lag through top right hole (99% in)
5. Level the mast
6. Drive 2" lags through corner holes (99% in)
7. Tighten lags with 1/2" socket
8. Remove pivot bolt, let mast hang
9. Pre-drill center holes with 7/32" drill bit
10. Remove drill bit, attach 1/2" nut setter
11. Fill hole with silicone
12. Drive 3" lags through center holes (99% in)
13. Tighten lags with 1/2" socket
14. Re-attach pivot bolt with 7/16" wrench
15. Level mast and tighten hardware with 7/16" wrench
16. Place dish on mast



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DIRECT TO BRICK

Supplies

- Four 2" lag screws
- Four lag shields
- 1/4" masonry bit
- 1/2" masonry bit
- Silicone

Process

1. Level the mount on brick
 - a. Not in mortar

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- b. Not on the edge of house
2. Level the mast
3. Mark the four corner holes
4. Verify the mast is level
5. Drill pilot holes with the 1/4" masonry bit
6. Verify again that the mast is level
7. Drill holes 2" deep with the 1/2" masonry bit
8. Insert lag shields
9. Insert silicone
10. Drive 2" lags through the four corner holes (99% in)
11. Tighten lags with 1/2" socket
12. Level mast and tighten hardware with 7/16" wrench
13. Place dish on mast



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DIRECT TO ROOF

Supplies

- Two 3" lag screws
- Four 2" lag screws
- Pitch patch

Process

*Must use fall protection, if on roof

1. Locate and mark the rafter
2. Level footplate and mark center holes
3. Pre-drill center holes with 7/32" drill bit
4. Remove drill bit, attach 1/2" nut setter
5. Fill holes with pitch patch
6. Apply pitch patch around four corner holes on bottom of footplate
7. Drive 3" lags through center holes (99% in)
8. Level the mast
9. Tighten lags with 1/2" socket



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10. Drive 2" lags through four corner holes (99% in)
11. Tighten corner lags with 1/2" socket
12. Level mast and tighten hardware with 7/16" wrench
13. Place dish on mast

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