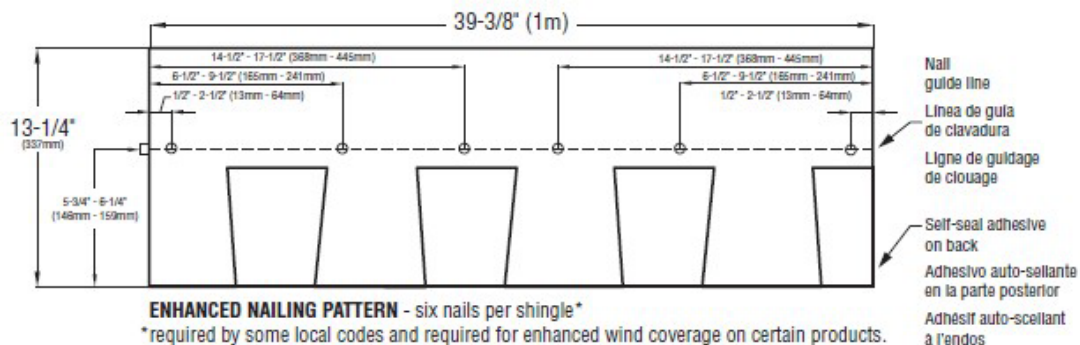




- Look for ASTM 3161 Class F or ASTM D 7158 Class H. Shingles without one of these labels on the bundle package are not to be installed.
- Install minimum 30# felt. 15# felt is not acceptable in Windstorm Zones. On pitches greater than 4:12, overlap felt by minimum 2". On pitches between 2:12 and 4:12, apply 2 layers at eve edge and overlap felt by half to cause a double layer. Applies for all felt types, synthetic, rolled, etc. Exception - A single layer of self adhering waterproof underlayment that meets ASTM D1970 can be used.
- Felt is to go under rake and over eave, with reference to drip edge.
- Drip edge must extend upslope a minimum of 2" past the edge of decking. 2x2 drip edge will not work in almost all cases due to fascia. JDSI recommends 4x2 drip edge be used.
- If any slope or part of the slope has a pitch less than 2:12, shingles are not allowed, regardless of underlayment type. Use Modified Bitumen or another approved low slope product.
- Use the nail pattern **SHOWN ON SHINGLE BUNDLE PACKAGE**. The bundles usually have both 4 and 6 nail patterns as options. In most cases, both will work however, you must use one of those. Be aware manufacturers may require the 6-nail pattern be used for warranty purposes.
- Look for pattern on shingle bundle. It will look like the diagram below. GAF Timberline HD, use this 6-nail pattern:



**ENHANCED NAILING PATTERN** - six nails per shingle\*

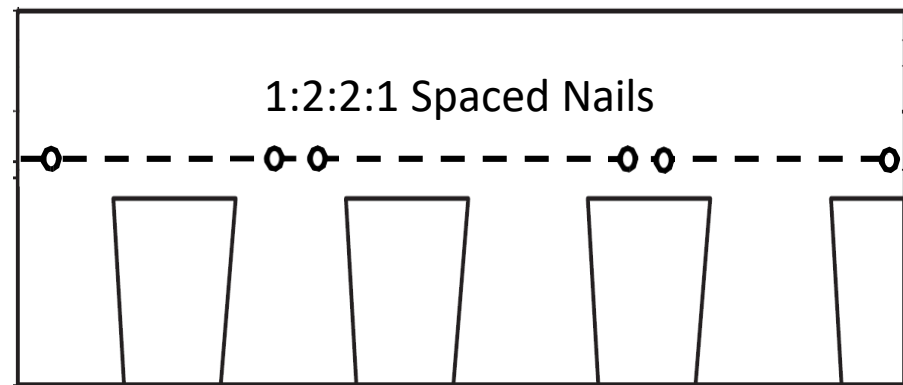
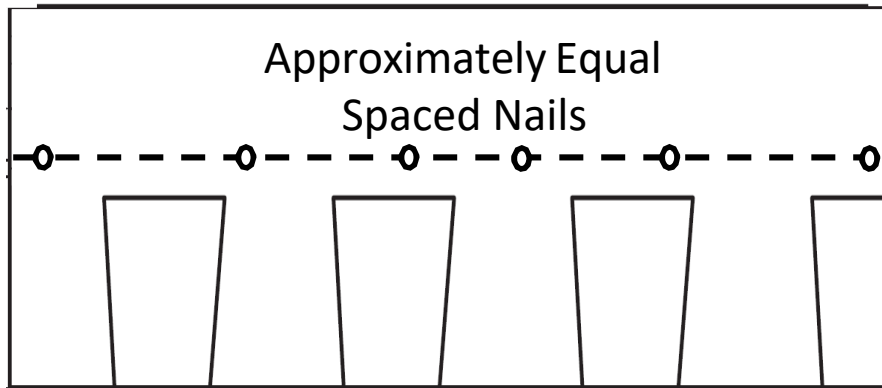
\*required by some local codes and required for enhanced wind coverage on certain products. See limited warranty for details.

**MODELO DE CLAVADURA AUMENTADO** - seis clavos por teja\*

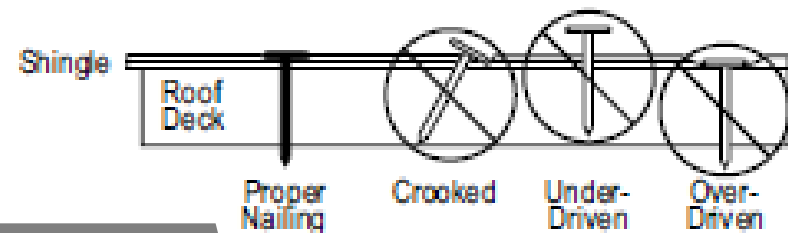
\*requerido por algunos códigos locales y requerido para cobertura aumentada contra el viento en ciertos productos. garantía limitada Ver para los detalles.



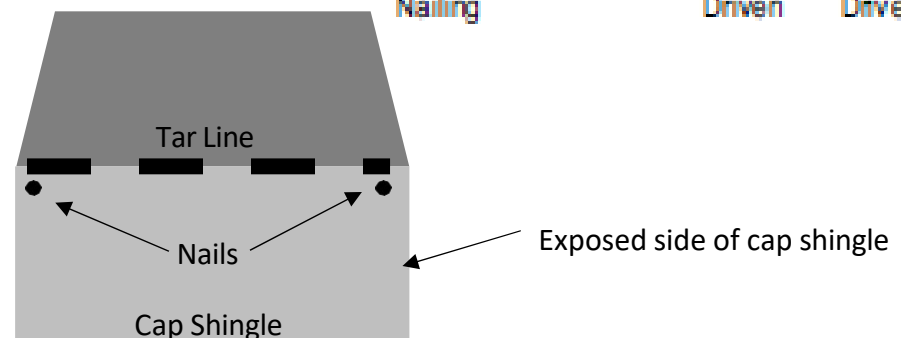
In general, 6-nail patterns will look like one of the following patterns.  
Remember – LOOK AT THE BUNDLE TO DETERMINE THE PATTERN!



- Ensure nails are not crooked, under driven, or overdriven.



- Install nails in cap shingle **OUTSIDE** tar line, not above or on line. JDSI recommends one nail per side on cap shingles.





### Other common errors:

- Starter shingles need to be nailed 2" - 3" from edge of roof.
- No shingles on slopes less than 2:12, NO MATTER WHAT!
- Nails need to have ASTM "F1667" on box.
- If flashing, jacks, vents, or other items are damaged, they must be replaced. You can use code upgrade as your justification.
- If you remove a single nail (or more) of a skylight or drip edge, it must be up to code to reinstall.
- Use TDI Product Evaluation Index or call JDSI to determine if a product is approved. Modified bitumen roofs must have positive slope. ( Water must flow away from home and toward the far edge of the roof.)
- Tell your crew to go slow, especially if gun-nailing. It is virtually impossible to install 5 or 6 nails in two seconds.
- If you overdrive or nail crooked, cover with roofing cement and another nail adjacent. If you install more than one nail wrong on a shingle, tear it off and redo it.
- If you have any doubts or questions, please call our Lead Inspector, Cody Whitehead: (281) 798-3423.



## Information requested by JDSI:

- **Scope.** We need to know what you are doing before you do it. Some examples include
  - Complete reroof – Means there is no part of the water shedding part of the home that is not being reroofed.
  - Partial reroof – Means there is a patio cover, car port, dormer, or other item attached to the home that is not being replaced.
  - Detached garage or garage attached by breezeway. You do not need to specify you are doing the garage if it is the same structure as the house.
  - If additional structures are being completed, such as sheds or boat slipcovers, we need to know that as well. Additional structures require their own certification and will be an additional charge.
  - Multiple roof types – An example of this would be if the house is composition shingled and the patio cover is modified bitumen (or another different material). We need to know the location of the modified bitumen (for instance: there is a modified bitumen patio cover attached to rear of home) and the size of the modified bitumen (or other different material) area.



- Start date – Please schedule your project as far ahead as possible. If you postpone due to weather or any other reason, please let us know as soon as you can.
- Repairs to framing – If you are replacing damaged rafters, joists, or any other framing, let us know. We MUST include that in the state paperwork.
- Decking – if you replace any decking, we need to know where and how much (The number of sheets replaced on each slope).
- JDSI requests to know material manufacturers (shingles, underlayment, nails) prior to installation, this way we can make sure they are in compliance before you use them. If materials are not verified prior to purchase or installation, you may need to replace them to pass inspection. Not all materials are approved.
- If using synthetic underlayment, the product being used needs to be listed on the “TDI List of Approved Underlayments”, available on the TDI website. You can also check with JDSI to see if underlayment or other materials are compliance with TDI requirements.