

An aerial photograph of a residential development, possibly a golf course community, with a large, semi-transparent red arrow pointing from the left towards the right. The arrow is thick and has a pixelated or jagged edge. The background shows several large, multi-story buildings with grey roofs, surrounded by green lawns and trees. A winding road is visible in the lower-left quadrant.

Roofing Basics 101



STRATUS
ROOFING

What You'll Learn Today

- About Us
- Roofing Components
- Replacement vs Repair
- Identifying Storm
Damage
- Maintenance and Care
- Insurance & Warranties



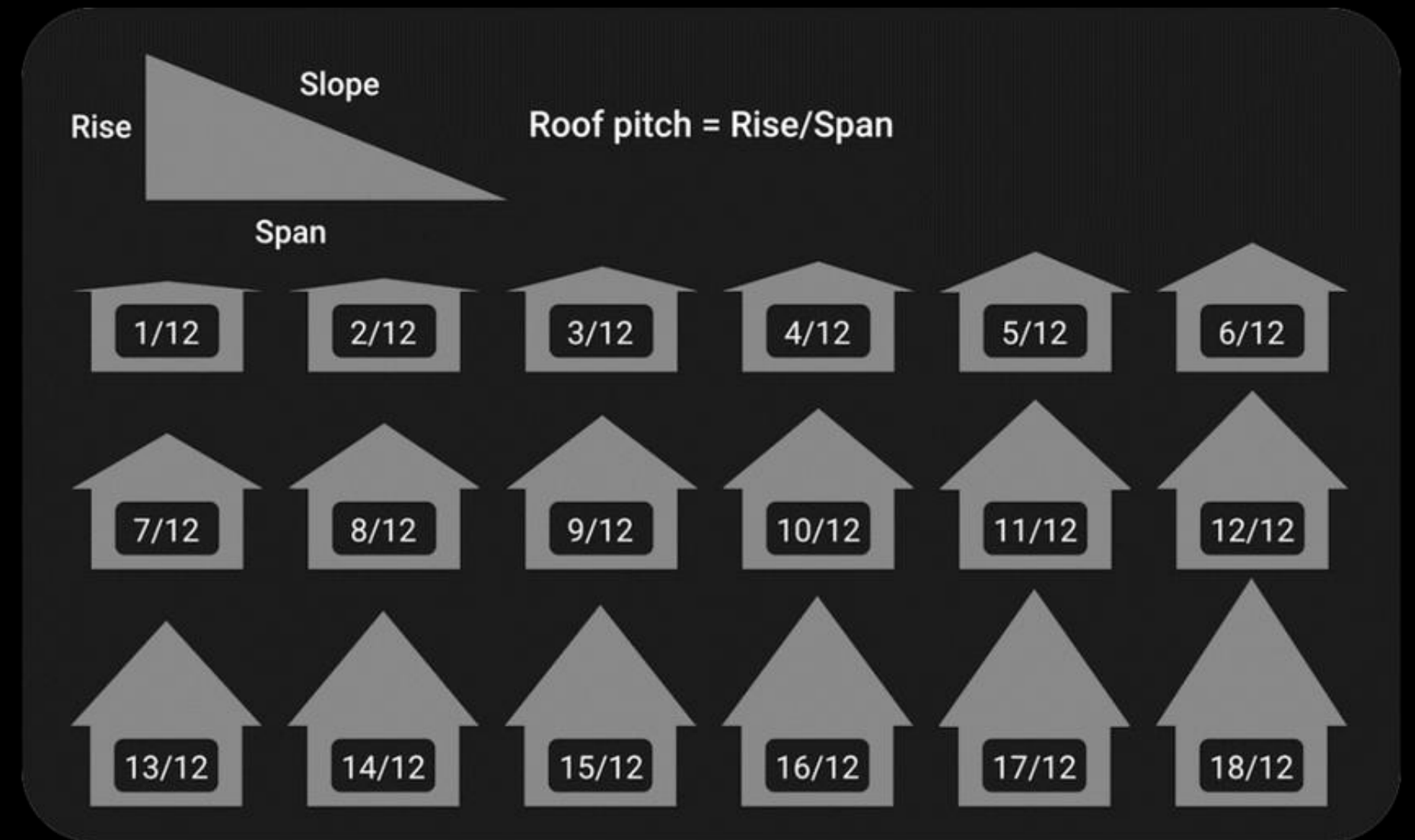
ABOUT US

- **30+ Years In Construction Industry**
- **Started Out In Property Management**
- **G.C. License**
 - **Understanding of How Roof Ties Into Structural Components**
- **GAF Master Elite Certified**
- **Drone Inspections**
 - **Thermal Analysis**



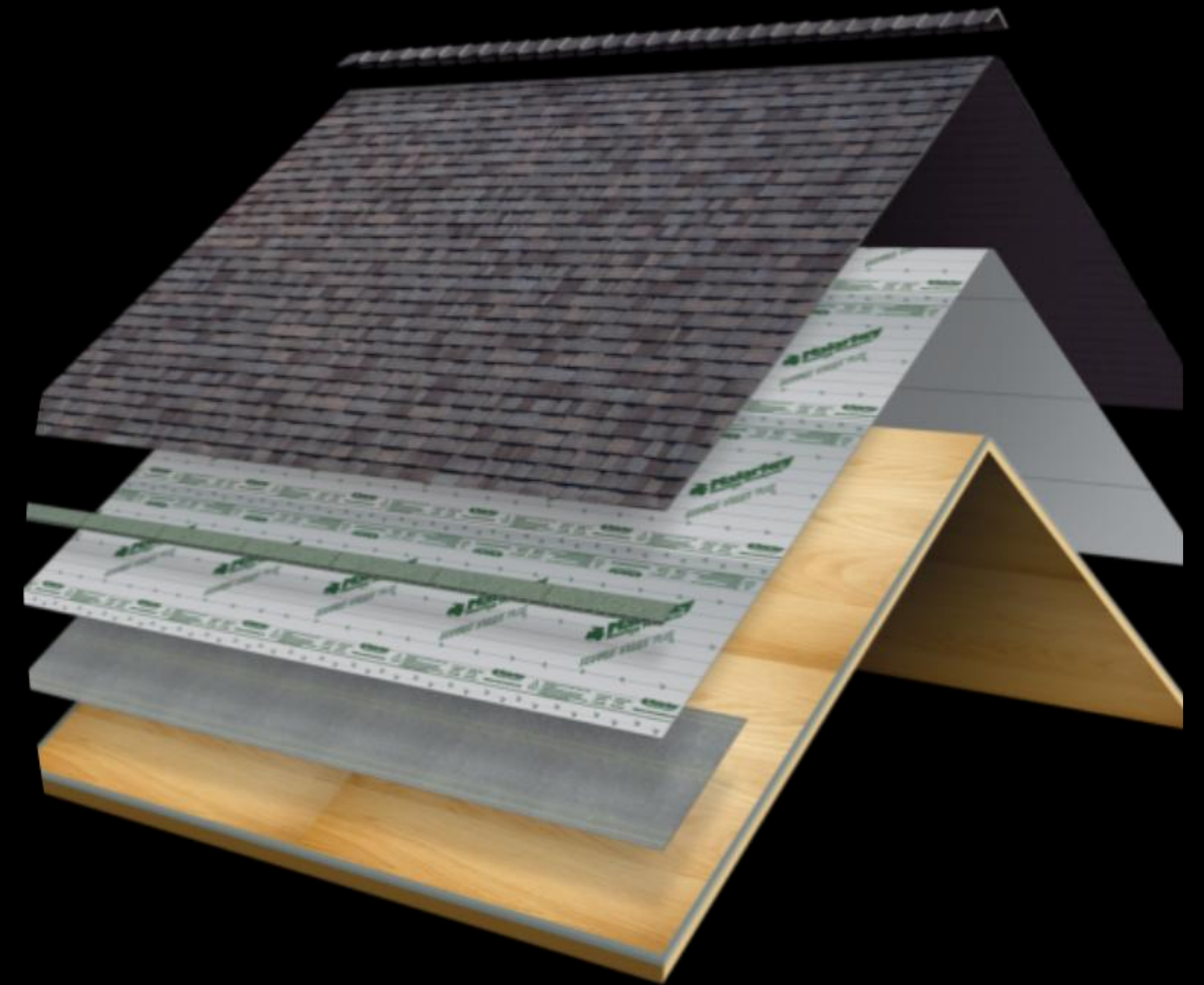
Roof Slope

- Pitch determines roofing materials
- Asphalt Shingles: Minimum of 2:12 pitch
- Flat Roofs: < 2:12 pitch
- Leak Prevention
- Prevents Water Pooling
- Higher Pitch = Additional Costs
- Higher Steep = Increases installation risk



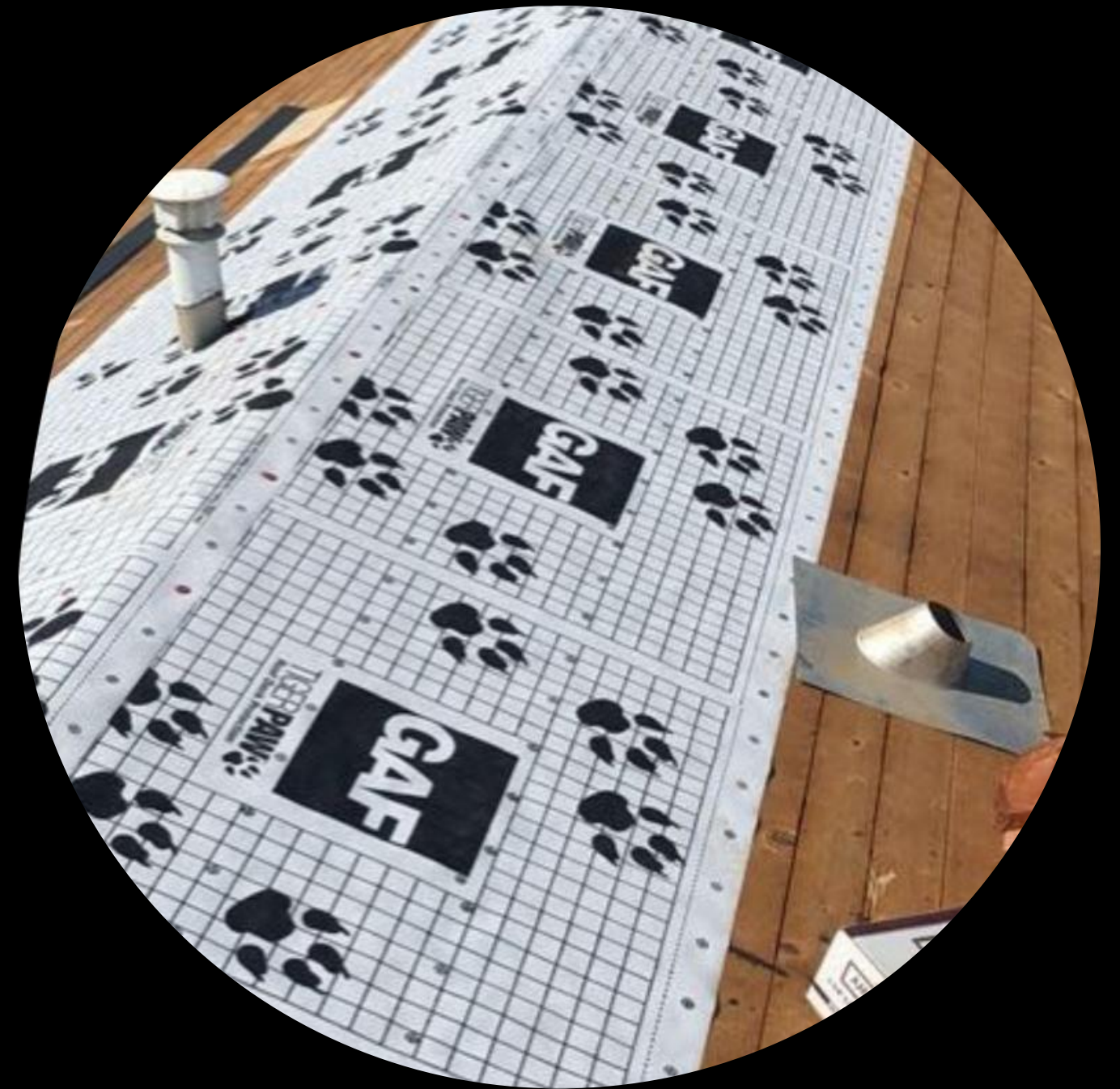
Roof Deck

- CDX Plywood or OSB Decking
- Nail-holding ability
- Smooth surface
- Dry roof deck – County Code Requirement
- Spacing (1/18 inch)
- Nailing patterns (6 inches on center)



Underlayment

- Required between the shingles and roof sheathing.
- Double underlayment is required by 2021 Florida Building Code
- Eaves and valleys, ice and water leak barrier underlayment is highly recommended.
- Quality underlayment = increased water prevention



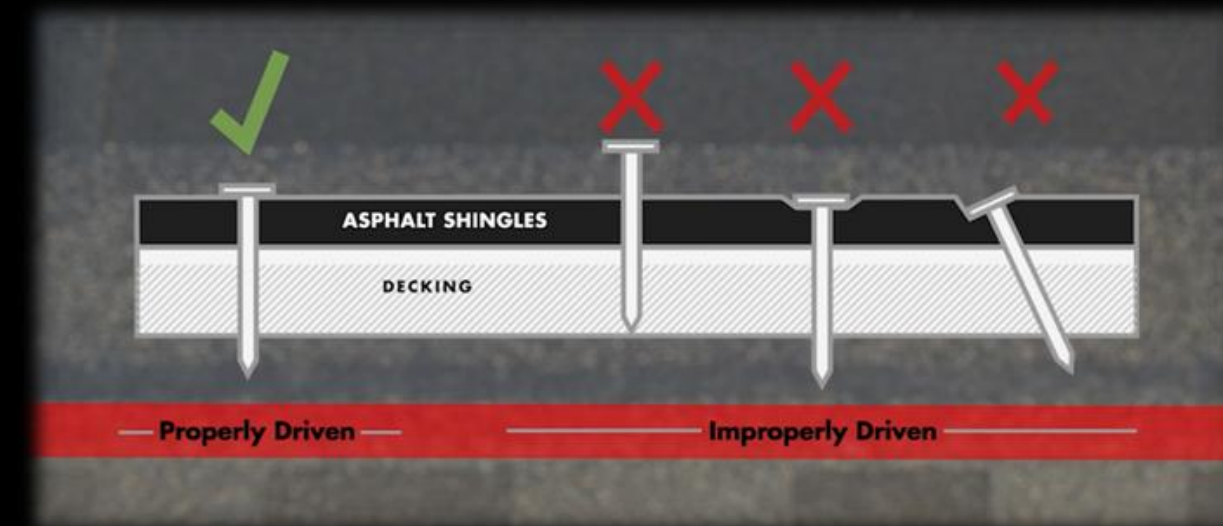
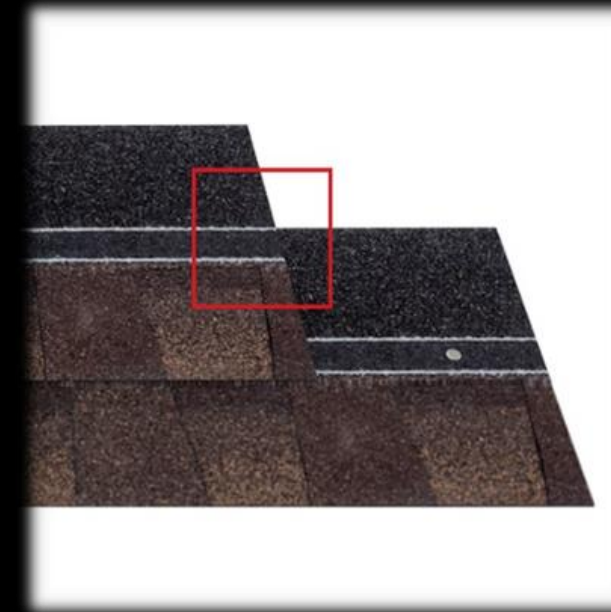
Starter Shingle

- Flipped shingle vs starter shingle
- Bull
- Code requirements
- Warranty requirements



Nailing Patterns

- Six nails per shingle.
- Nails must not be exposed.
- Six nails enhances wind durability.
- No high or low nails.
- Proper nailing avoids leaks, loose shingles and blowoffs.
- Exposed nail heads and nail pops are known as shiners due to improper installation.



Hip & Ridge Caps

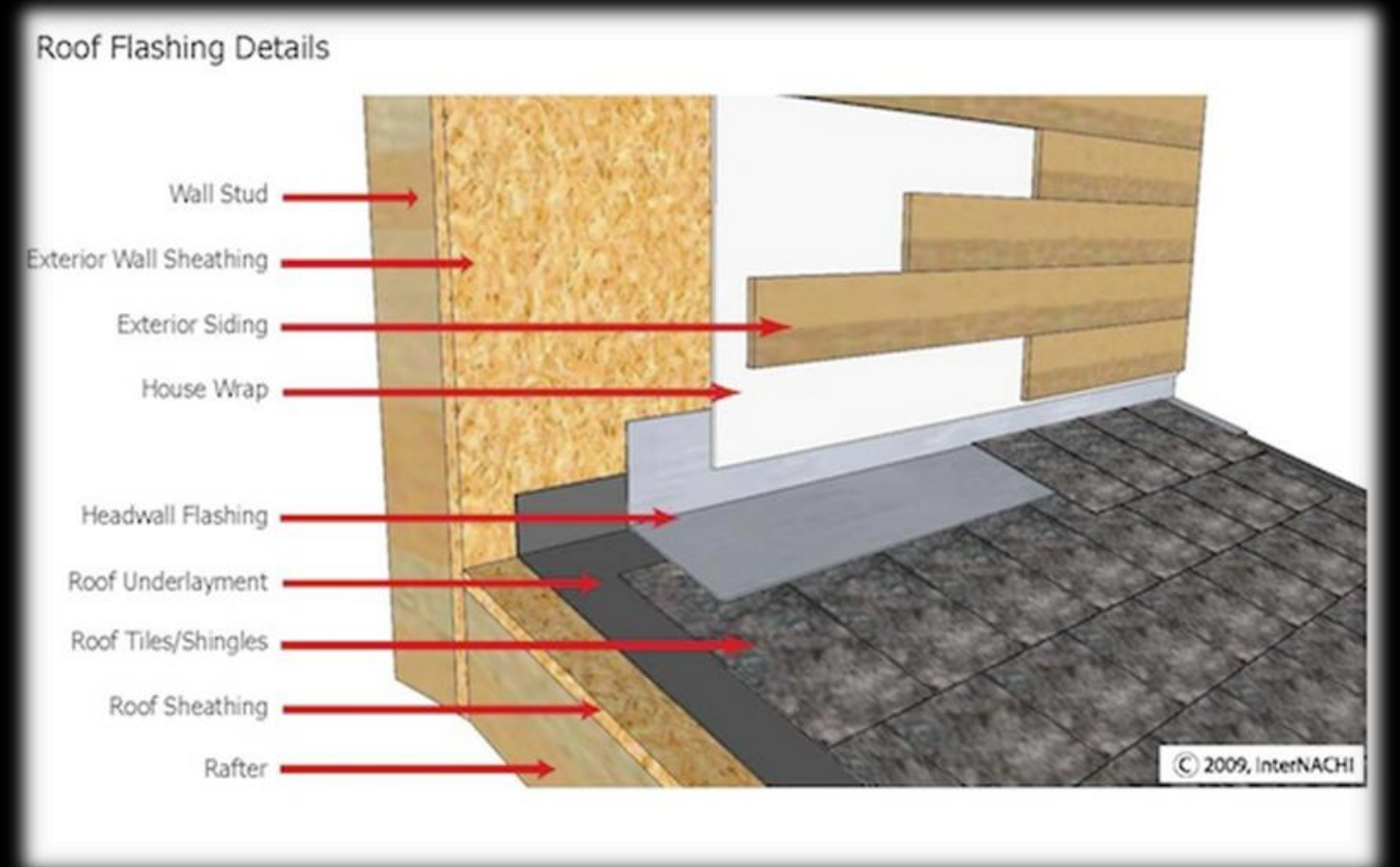


- Made from the same materials as shingles.
- Major differences: smaller than regular shingles, thicker & pre-bent to allow them to fit along the ridge easily.
- Allows for air to flow through the attic.
- Leak protection
- Use actual ridge cap shingles for warranty.



Flashing

- L – flashing
- Step flashing
- Counter flashing
- Wakaflex
- Locations:
 - Front walls (headwalls) vertical walls behind a sloping roof.
 - Side walls: vertical walls along the edge of roof
 - Step flashing: where roof deck meets a sidewall
 - Valleys
 - Chimneys
 - Drip edge
 - Skylight
 - Kickout (rain diverter flashing)
 - Penetrations



Ventilation & Insulation

- Proper underdeck ventilation
- Reduce moisture build up
- Prevent mold
- Ventilation must be designed to meet the local code minimum requirements.
- Without ridge ventilation, attics would trap unwanted air, decreasing the air quality and increasing energy costs.



Roof Penetrations



Rain Cap: Chimney Vents



Exhaust: Kitchen & bath exhaust fans (easy to notice hall damages).



Gooseneck: Attic ventilation (kitchen hoods or dryer vents).



Electrical Meter Mast: Provide electricity to older homes.



Pipe Jacks: Plumbing vents to allow air to enter the drainage system.



Turbine Vents: Used to draw out hot air during rainy/humid weather.



Turtle/Box Vent: Releases warm air from attic.



Power Attic Vent: Roof ventilation.



Satellite

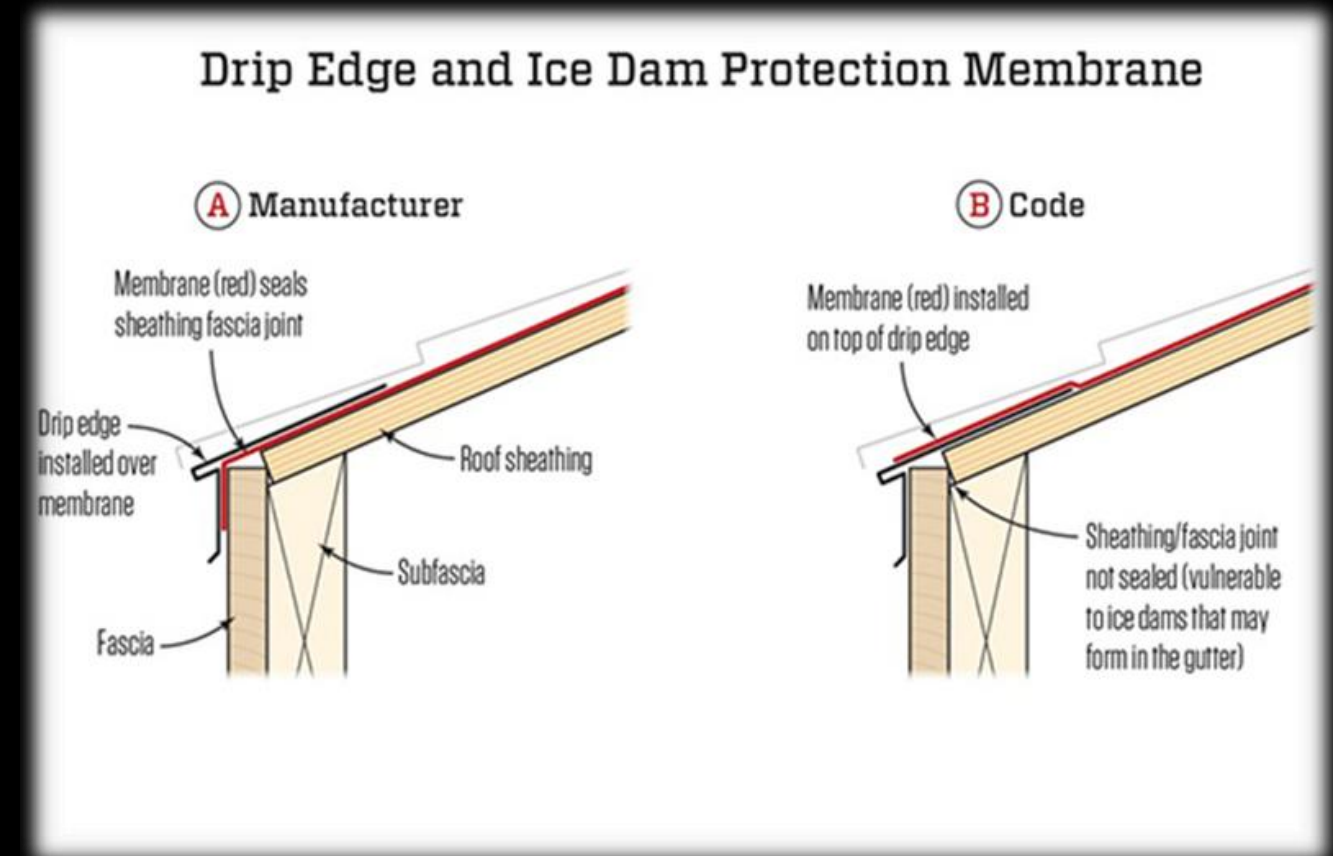
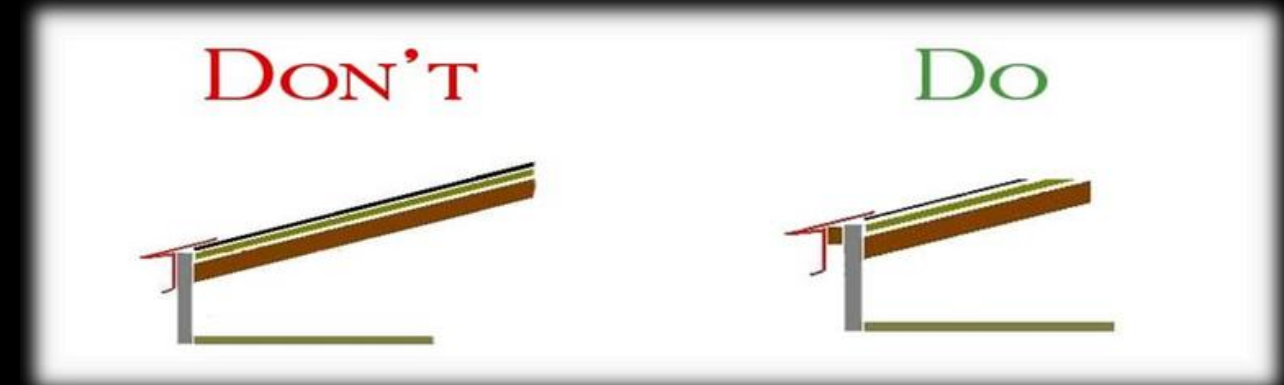
Roof Penetrations



- Solar Tubes
- Skylights (Flat or dome)
- Solar Water Heater
- Swimming Pool Panels
- Electric Panels

Drip Edge

- Angled metal flashing
- Control moisture
- Redirect water from the fascia and into the gutters
- Prevent fascia & soffit damage
- Keep pests/critters out of risk
- Keep porch dry
- Stabilize roof during strong storms
- Protect roof from ice dams
- 4-inch nailing pattern



Dead Valley



Signs That You May Need A New Roof

- Moisture Intrusion/ Water Leaks
- Multiple Repairs
- Curved Shingle Edges
- Missing Granules OR Granules Found In Gutters
- Rodent/Critter Damage
- Damage By Surrounding Trees
- Blistering (Moisture trapped in shingle, bubbles, then pops)
- Zippering
- Nail Pops
- Visible Algae Or Moss On Roof ---> Moisture Intrusion
- Roof is 20 years old or more

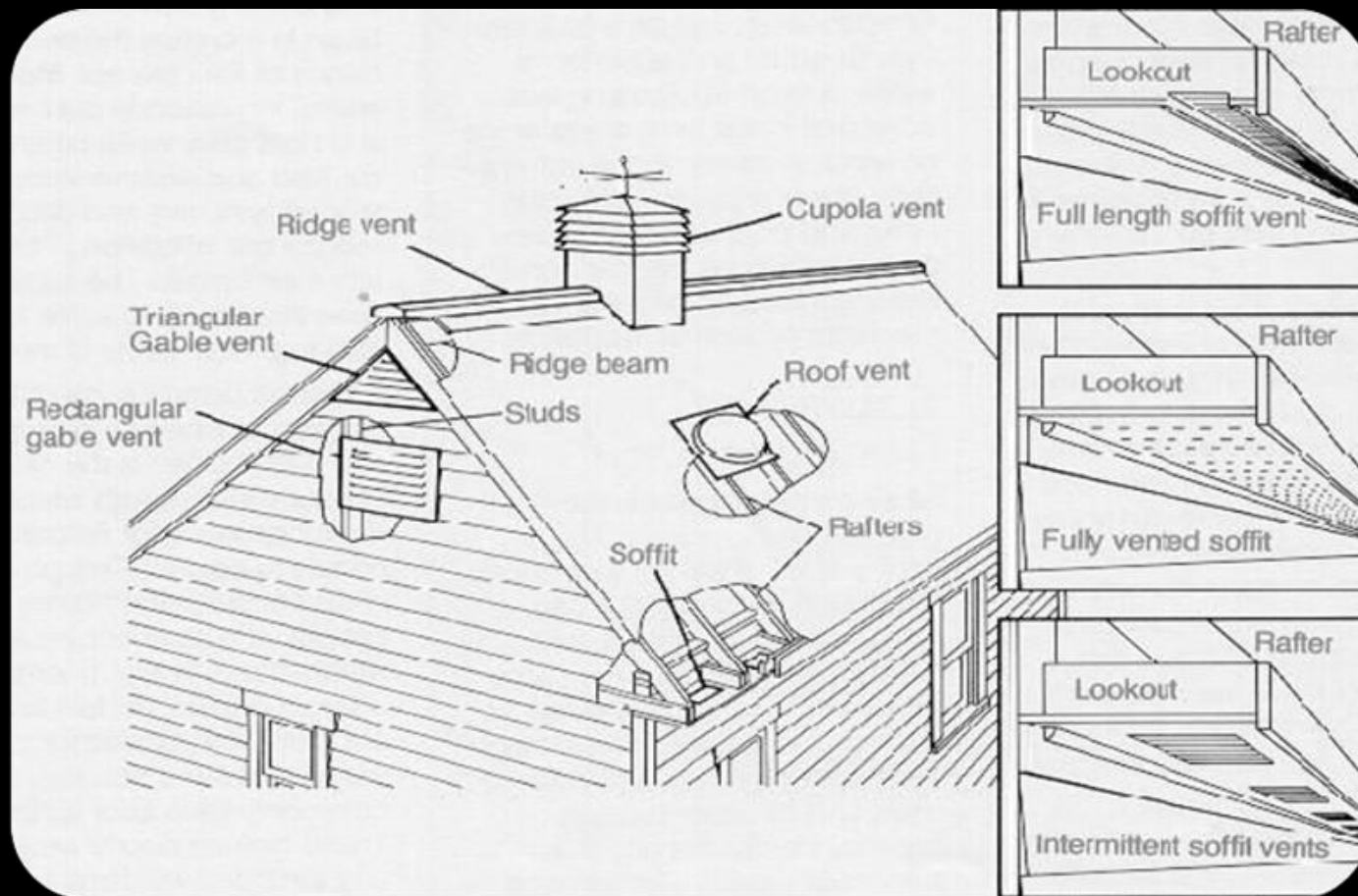


Signs of Rotted Roof Decking

- Roof leaks
- Wet spots on ceiling
- Stains on interior walls
- Peeling wallpaper
- Water stains on rafters
- Mold & mildew in attic
- Sagging ceiling or roofline



Signs of Poor Roof Ventilation



- Roof leaks
- Signs of mold or mildew
- Random hot & cold areas in the home
- HVAC problems



Box Vent



Wind Turbine
or "Whirly Bird"



Power Vent



Ridge Vent



Gable Vent



Solar Attic Fan



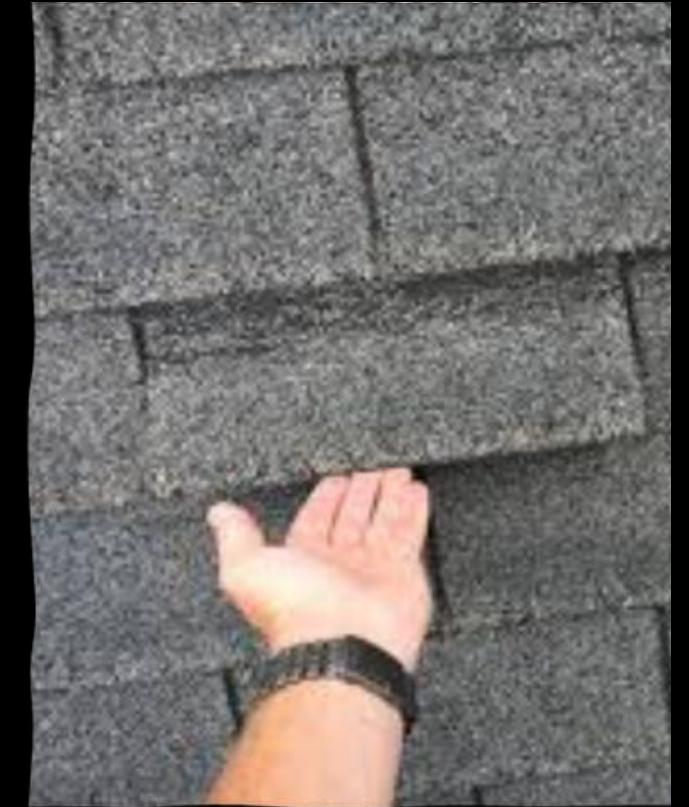
Cupola Vent



Soffit Vent

Storm Damage Signs on Shingled Roofs

- Wind damage: Torn, missing or creased shingles.
- Recent wind damage: Adhesive still on shingle, lack of oxidation on the nails, and bright coloration in the creasing on the asphalt.
- Gray-colored asphalt, rusted nails, and debris below shingles(older damage).
- Hail impact marks will vary in size and shape. Depths can appear in metal vents, flashing, and AC unit surface. The larger the hail, the father the impact.



An aerial photograph of a residential neighborhood. The houses have brown roofs and are surrounded by green lawns and trees. A pond is visible on the left side of the image. The overall scene is a typical suburban setting.

Other Factors That Affect Roof Performance

- Design of the roof
- Installation
- Materials used
- Proper ventilation
- Choosing a qualified roofer
- Considering foot traffic on the roof
- Temperature
- Blistering and shrinkage
- Roof maintenance

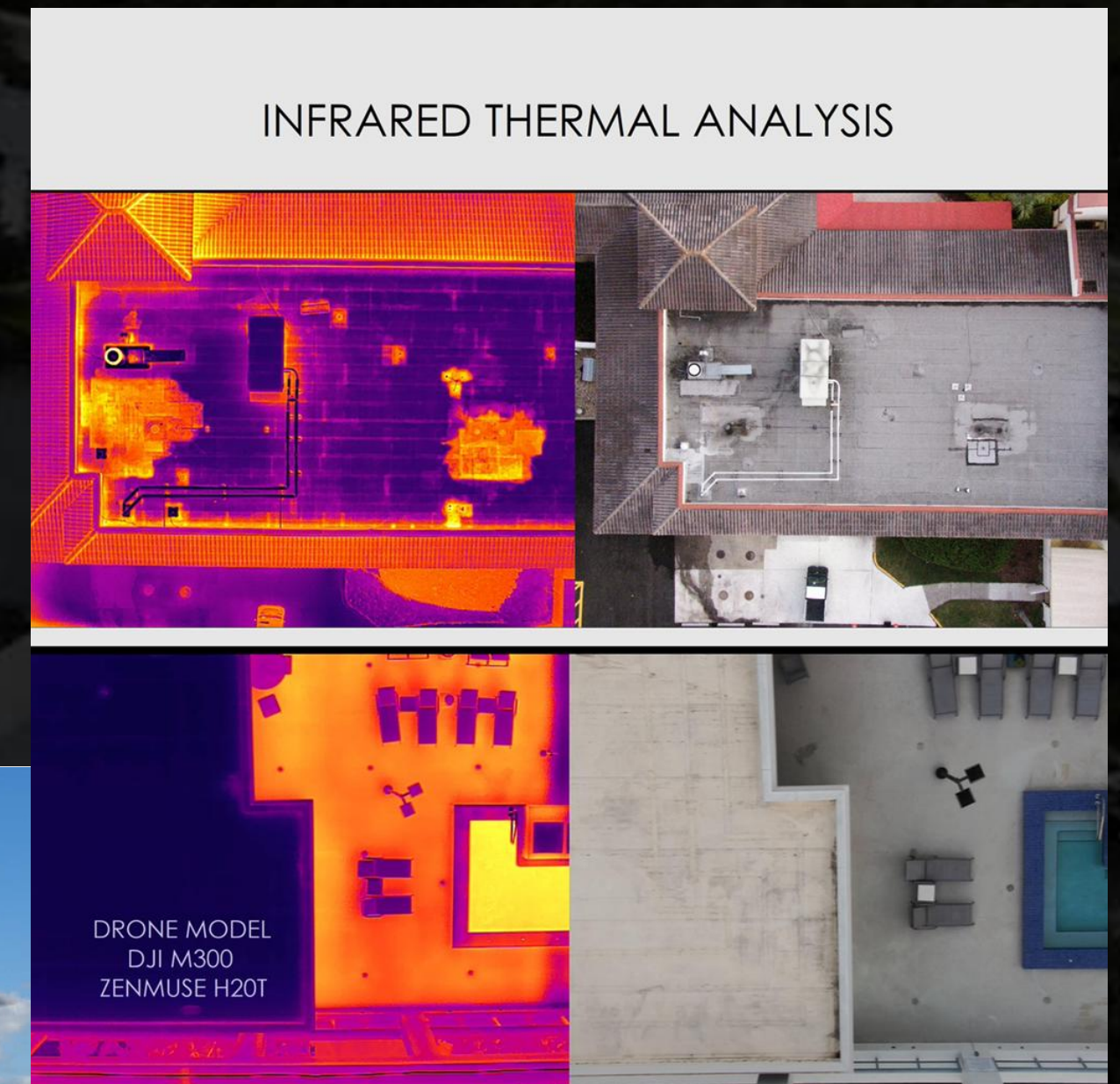
Insurance & Warranties

- Insurance
 - Investigate- Know the steps to take when first made aware of damage to your roof or being told by your carrier to replace your roof.
- Reserves vs Warranties
- Unlimited Wind Warranties
- Manufacturer warranty for materials and labor



How to Properly Take Care of Your Roof?

- FREE Annual Roof Assessment
- Professional Roof Cleaning
- Debris Removal
- Gutter Cleaning



THANK YOU!



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