

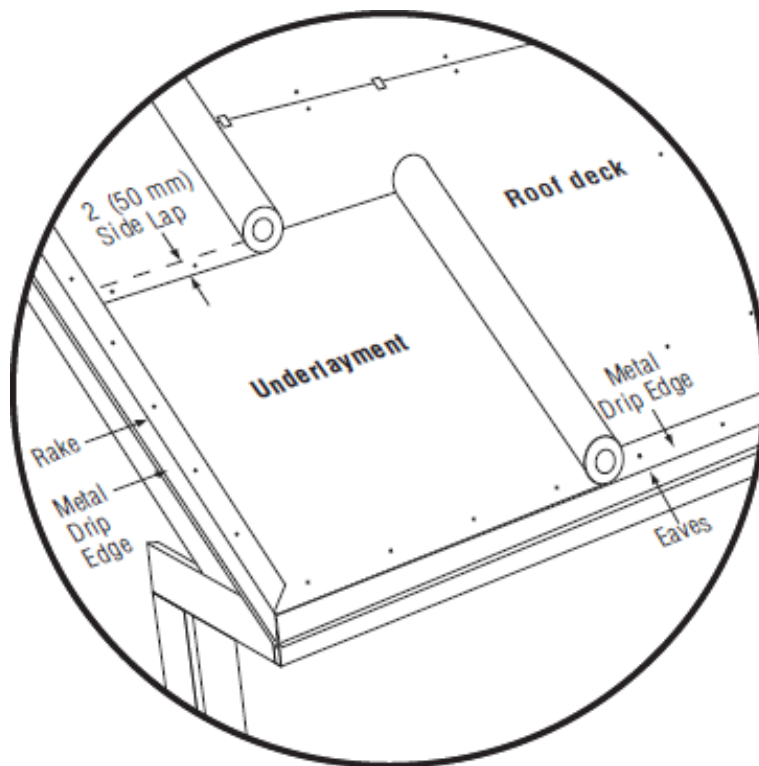
Single Layer Underlayment Installation

Ludowici recommends using nails **rather than staples** for fastening of membrane and the battens. Nails provide more resistance against underlayment tear out. Nails must be corrosion resistant capped nails complying with the applicable code. It is very important, whether hand nailing or using a pneumatic gun, that the fasteners be driven flush.

INSTALLATION METHOD:

When applying underlayment, the key is to keep the product as wrinkle free as possible.

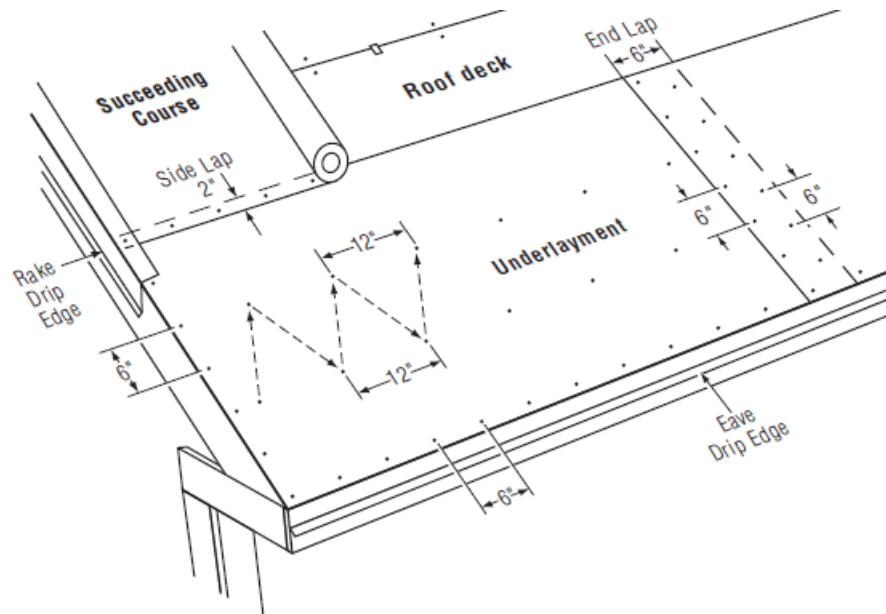
1. Unroll the underlayment and allow it to relax. Lay the underlayment parallel with the eaves. The eaves edge of the underlayment should go **OVER** the drip edge eaves flashing but go **UNDER** the drip edge flashing along the rake.



Applying Water-Resistant Underlayment Along the Eaves and Rake

2. Around the perimeter of the underlayment, place the nails approximately 6 inches apart and about 1 inch in from the edge. In the main area of the underlayment, two rows of nails are used. The first is placed 12" up from the bottom edge and the second is 24" from that same edge (or in fact 12" from the upper edge). This nicely separates the 36" wide underlayment sheet into thirds. Nail along these two rows 12- 15" apart. Nail placement should be alternated so that one row places the nail opposite the open area of the first, creating a sort of zigzag pattern. This will result in a simple pattern with all nails being approximately 12-15" apart

LUDOWICI®



Standard Nailing Pattern for Water-Resistant Underlayment

3. Succeeding courses should be unrolled in a similar manner overlapping the previous course by 2". Be careful to roll it out straight as the underlayment will tend to slide down the pitch of the roof and end up crooked. The spacing of nails in this overlap area should be approximately 6" apart, centered in the 2" area.
4. If the length of the roll is not enough to complete the entire run, an end lap of 6" is required. We recommend two rows of nails 6" apart to hold the lapped edges in place. End laps should be located 6-8' from any other end lap that may be in the preceding underlayment course.
5. Do not over-stack tile for best results follow the recommendations as outlined in the Tile roof Institute manual, by stacking in the 6,9,12 pattern

SAFETY CONSIDERATION

6. Contractor shall observe all safe roofing practices as required by OSHA and local codes. Use caution when walking on steep slope especially when the surface is slippery and/or dusty. Failure to use required safety gear, footwear and equipment can result in serious injury.
7. Placing material and tile on roof: Certain tiles with minimal contact with surface of Pro70 may be prone to sliding especially when temperature is over 100 (F).
8. Appropriate measures such as installation of a batten system, reducing number of tiles will address this issue. Contractor shall also use roof jacks, toe board or storage platforms secured to the underlying roof deck to prevent slippage of stored roofing materials.

Exposure:

Maximum exposure time for Pro70 is 90 days, however Pro70 is not a waterproofing system by itself and provides watertight system when used in conjunction with tile. If material is exposed and there is chance of precipitation appropriate measure shall be taken to prevent water from getting to building from laps. This includes but not limited to sealing laps with compatible mastics.