

Palm Beach Shores Apartments – Coal Tar vs. Single Ply

Coal Tar

Brief Description of Roof Assembly

Base layer Isocyanurate insulation mechanically fastened @ steel deck, mopped @ concrete deck.

Insulation cover board – $\frac{1}{2}$ " fiberboard installed in hot asphalt.

Fiberglass base installed in hot asphalt.

Three (3) plies tar-glass felt in hot coal tar pitch.

Gravel surface embedded in flood coat coal tar pitch.

Positives:

Numerous plies roof membrane - base + 3 felt = 4 total plies

Final protective flood coat and gravel

Excellent protective surface for hail, weather and foot traffic

No coal tar roof lost in all hurricanes due to weight of final surfacing

Life of coal tar roofing often exceeds 30 years

Negatives:

Initial cost higher

Single Ply Membrane

Brief Description of Roof Assembly

Base layer Isocyanurate insulation mechanically fastened @ steel deck, glued down @ concrete deck.

NO Insulation cover board.

Single membrane installed by mechanical fasteners or adhered.

Positives:

Initial cost less expensive

Negatives:

Single ply roof membrane = 1 total ply

No final protective flood coat and gravel

Poor protective surface for hail, weather and foot traffic

Vulnerable to hurricanes due to no surfacing

Life of single ply roofing less than 20 years