



A **Protected** deck or flat roof deck system typically refers to a deck system where the waterproofing component is not the finished pedestrian traffic surface; and a separate wear surface is applied over top. So, a **Protected System** consists of 2 parts:



1. The Waterproofing Component: typically EPDM, Torch Applied Roofing, PVC Membranes
2. The Pedestrian Traffic Surface: virtually any [Exposed System](#) such as Concrete, Wood, Composite, or Liquid Coatings
 (*note - a vinyl deck membrane can be both the waterproofing component AND the traffic surface)

The cost for each type of decking material varies region to region, so please do your research to ensure you are choosing the best system for your project requirements, installation conditions, and maintenance budgets.

How are you going to protect the structure that you have invested a substantial amount of time and money on?

Decks, especially roof decks, are a part of the building envelope which is one of the most important elements of a building to protect. Our commitment is this: *Duradek products are only installed by trained, professional applicators to ensure the job is done right the first time!* But that's not the only thing that sets Duradek apart from other deck and roof deck materials.

Compare Protected System waterproofing product features below:

			EPDM/Rubber Roofing	Torch Applied Roofing
Moisture	If penetrated, moisture can gather in any airspace it finds beneath, but it is very resistant to penetration. Full adhesion limits the ability of water to travel. Intended to be covered with exterior tile.	If penetrated, moisture can gather in any airspace it finds beneath. Full adhesion limits the ability of water to travel. Intended to be used where a floating system overlay is desired.	If the membrane is penetrated, moisture can gather and spread in the airspace beneath. Spread of moisture is less likely if fully adhered. Not intended as a walking surface and would require a top layer.	If penetrated, moisture can gather in any airspace it finds beneath. Not intended as a walking surface and would require a top layer.
Rot/Deterioration	Vinyl will not rot. The wooden structure beneath is susceptible to rot if water penetrates the vinyl. Protected from high heat, UV exposure and from membrane surface damage by the tile.	Vinyl will not rot. The wooden structure beneath is susceptible to rot if water penetrates the vinyl. Susceptible to high heat and UV exposure over time if not fully covered.	Will not rot, but is not resistant to moss, especially in shaded areas. Eventual deterioration from heat, moisture, UV, algae/moss.	Does not rot, but degrades overtime with exposure to moisture, heat, UV and moss/algae.
Maintenance	The vinyl membrane requires no maintenance but the tile surface will require sealing of the tile and grout lines.	Can be easily repaired with a heat welded repair. Most maintenance would be on the overlay material (wood, concrete, composite).	Punctures easily as it is not made for foot traffic. Product can be repaired with an EPDM patch and adhesive. Most maintenance would be on the overlay material (wood, concrete pavers, composite).	Can be easily repaired with a torch-on patch, but it is visible and unattractive. Most maintenance would be on the overlay material (wood, concrete, composite).

COMPARE WATERPROOFING OPTIONS FOR PROTECTED DECK AND ROOF DECK SYSTEMS

			EPDM/Rubber Roofing	Torch Applied Roofing
Cracks	Highly elastic, Tiledek moves with the building and will not crack. The tiles on the surface must be installed exactly as specified or cracks may occur.	Highly elastic, Duradek moves with the building and will not crack.	EPDM is very elastic and will resist cracking but should be protected from the ultraviolet rays of the sun.	Reasonably flexible and may be susceptible to cracks on areas of high UV exposure as it ages.
Installation Conditions	Tiledek can be installed in almost any temperature but must be applied to a dry surface. It can be covered by the tile with thinset mortar immediately.	Duradek can be installed in almost any temperature but must be applied to a dry surface. It can be used immediately.	EPDM is a sheet material that can be applied in almost all weather conditions. The perimeters are usually glued which would require dry weather with suitable installation temperatures.	Dry conditions are necessary. Can be dangerous due to open flame. Insurance companies require roofers to monitor installation for several hours to ensure no fires have started.
Does It Meet Roofing Standards?	Yes	Yes	Yes - but does not meet walkable roofing standards without an overlay.	Yes - but does not meet walkable roofing standards without an overlay.
Pedestrian Safety	It depends upon the surface characteristics of the tile.	It depends on the overlay: wood boards can be slippery or can splinter.	It depends on the overlay: wood boards can be slippery or can splinter.	It depends on the overlay: wood boards can be slippery or can splinter.
Fire Resistance	Class A	Class A on cement board or concrete; Class C on plywood. Also depends upon fire resistance of overlay (the complete system gets a fire rating, not just the membrane).	Completely dependent upon the overlay (the complete system gets a fire rating, not just the membrane).	Completely dependent upon the overlay (the complete system gets a fire rating, not just the membrane).
Life Span	20+ Years	20+ Years	20+ Years	15+ Years

Duradek has been in the deck and balcony waterproofing industry since 1974.

We pioneered the use of vinyl membranes as an outdoor walking surface and were the first to have an approved single-ply “walk-on” roofing membrane. We have come a long way since then by incorporating installation training and a full line of designer colors and patterns.



Discover the Duradek Difference.

For Exposed System Comparison, see [Compare Surface Options in Exposed Deck and Balcony Systems.](#)

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Waterproofing Solutions Since 1974