



Proper Selection of Roof Types: 12 Roof types Considered

Presented by:

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12 Roof Types Considered

- Quick Survey
- Low Slope Roof Systems
 - Less than 2:12 or 2% slope
- Steep Slope Systems
 - Greater than 2:12 slope...Duh!
- Q & A

12 Roof Types Considered

- Quick Survey
 - School District
 - Design Firm
 - Construction Manager
 - Contractor
 - Interested in NEW construction
 - Interested in REMEDIAL construction

12 Roof Types Considered

- Low Slope
 - Built-Up
 - Modified Bitumen
 - Spray Applied Foam (SPUF)
 - Rubber Single-Ply
 - Thermoplastic Single-Ply
 - Rubberized Asphalt

Low Slope: Built-Up

- Advantages

- Very tough
- Redundant
- Excellent longevity
- Many contractors
- Well understood

- Disadvantages

- “Dirty” application
- Smell
- Cost
- Craftsmanship
- Repair hassle

Low Slope: Built-Up



Low Slope: Built-Up



Low Slope: Modified Bitumen

- Advantages

- Very tough
- Somewhat redundant
- Good longevity
- Many contractors
- Well understood

- Disadvantages

- Fire danger
- Cost
- Craftsmanship
- Repair hassle
- Formulation issues

Low Slope: Modified Bitumen



Low Slope: Modified Bitumen



Low Slope: Foam Roofing

- Advantages

- Light
- High insulation values
- Good longevity
- Simple detailing
- Easy to fix

- Disadvantages

- Overspray
- Easily damaged
- Poor aesthetics
- Recoating issues
- Longevity ?

Low Slope: Foam Roofing



Low Slope: Foam Roofing



Low Slope: Foam Roofing



Low Slope: Rubber Single-Ply

- Advantages

- Installs quickly
- Easy to detail
- Excellent longevity
- Easy to fix

- Disadvantages

- Adhesive splicing ?
- Easily damaged
- Black color...
- Small contractor base

Low Slope: Rubber Single-Ply



Low Slope: Rubber Single-Ply



Low Slope: Thermoplastic Single-Ply

- Advantages

- Installs quickly
- Easy to detail
- Energy efficient
- Excellent longevity
- Reasonably easy to fix

- Disadvantages

- Potential for damage
- Cost
- Small contractor base

Low Slope: Thermoplastic Single-Ply



Low Slope: Rubberized Asphalt

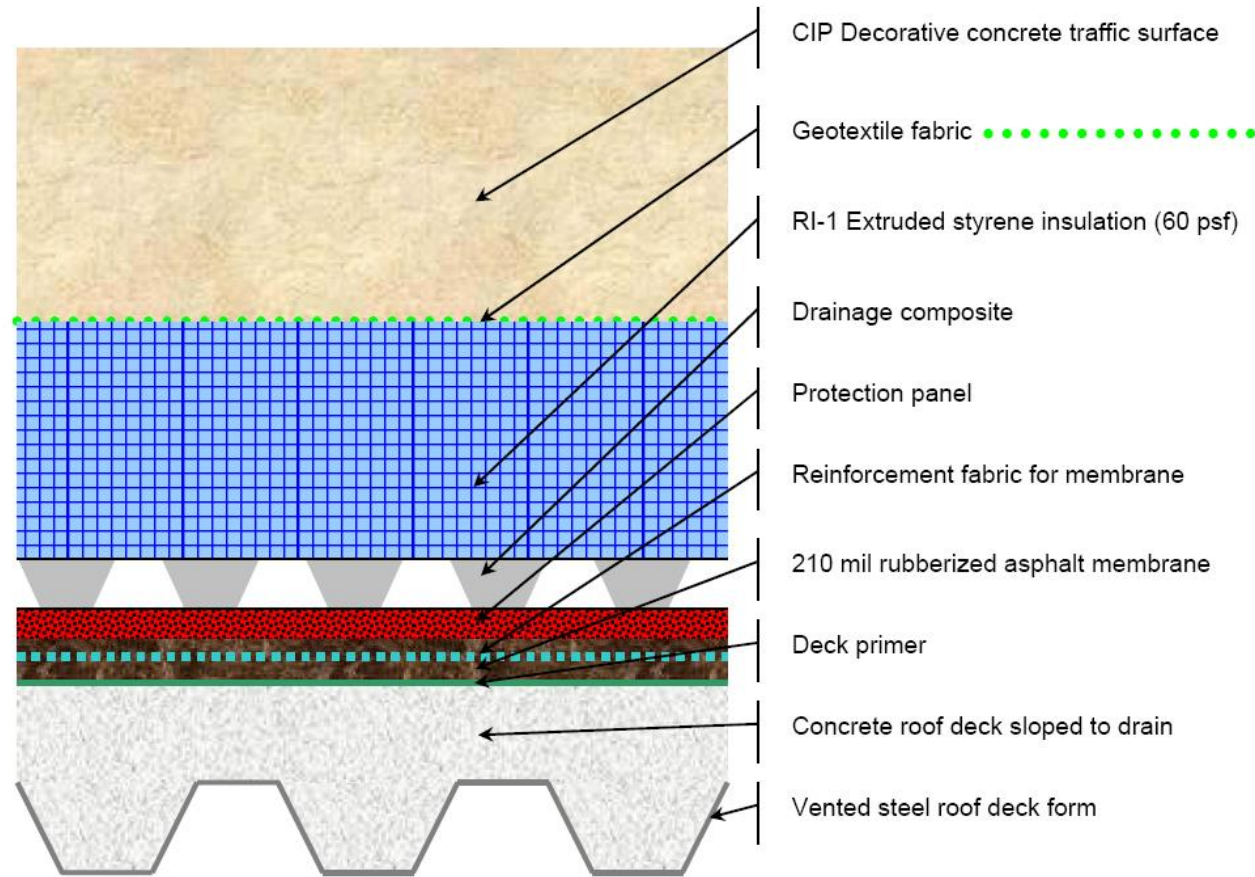
- Advantages

- Installs quickly
- Easy to detail
- Energy efficient
- Outstanding longevity

- Disadvantages

- Repairs are tedious
- Cost
- Small contractor base
- Concrete substrate

Low Slope: Rubberized Asphalt



Low Slope: Rubberized Asphalt



12 Roof Types Considered

- Steep Slope Roofs
 - Composite (Asphalt-Fiberglass) Shingles
 - Wood Shakes
 - Metal Panel Systems
 - Terra Cotta Tiles
 - Concrete Tiles
 - Slate

Steep Slope: Composite Shingles

- Advantages

- Install quickly
- Beautiful aesthetics
- Outstanding longevity
- High fire resistance
- Large contractor base

- Disadvantages

- Easily damaged
- Difficult to repair
- Require vented decks

Steep Slope: Composite Shingles



Steep Slope: Composite Shingles



Steep Slope: Wood Shakes

- Advantages

- Beautiful aesthetics
- Fair longevity
- Natural product

- Disadvantages

- High Fire Risk
- Easily damaged
- Difficult to repair
- Require vented decks
- Questionably sustainable

Steep Slope: Wood Shake



Steep Slope: Metal Panels

- Advantages

- Beautiful aesthetics
- Excellent longevity
- Low life cycle cost
- Large contractor base
- Damage resistant
- High fire resistance

- Disadvantages

- Difficult to detail
- Finish can be marred
- Difficult to repair
- Colors fade

Steep Slope: Metal Panels



Steep Slope: Metal Panels



Steep Slope: Terra Cotta Tile

- Advantages

- Beautiful aesthetics
- Outstanding longevity
- Low life cycle cost
- Large contractor base
- High fire resistance

- Disadvantages

- Difficult to detail
- Weight
- Brittle: No foot traffic
- Can be expensive

Steep Slope: Terra Cotta Tile



Steep Slope: Terra Cotta Tile



Steep Slope: Concrete Tile

- Advantages

- Beautiful aesthetics
- Outstanding longevity
- Low life cycle cost
- Large contractor base
- High fire resistance

- Disadvantages

- Difficult to detail
- Some colors fade
- Brittle: No foot traffic

Steep Slope: Concrete Tile



Steep Slope: Concrete Tile



Steep Slope: Slate

- Advantages

- Beautiful aesthetics
- Outstanding longevity
- Low life cycle cost
- High fire resistance

- Disadvantages

- Difficult to detail
- Brittle: No foot traffic
- Very expensive
- Few contractors available

Steep Slope: Slate



Allana Buick Bers: Architectural Engineering

- Roofing
- Waterproofing
- Curtain Walls
- Stucco and Stone Veneer
- Metal Panel Systems
- Insulation Systems
- Garden Roof Assemblies

Questions and Answers

Thank You!

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