

SPEC ID: 28727

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (AC-1) Maximum Slope 1:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite
  NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 3. 1-Ply Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive.
- 2-, 3-Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. Coated with ASTM D1227 asphalt emulsion with clay or aluminum pigment reflective additive applied at a minimum coverage rate of 3 gal./sq.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference

number or code and the WHI Certification Mark.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0571, WHI-495-111592, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28728

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

### MBTechnology Combustible Deck (AC-2) Maximum Slope 1:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 3. 1-Ply Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive.
- 2-, 3-Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. 1-Ply Supercap SBS SC85GWH, Supercap SBS SC100GWH, or Supercap SBS SC100WWH cap sheet; fully adhered with ASTM D3019 cold process adhesive or ASTM D312 roofing asphalt, hot mopped. OR 1-Ply Fastorch SBS FT140GWH or Fastorch SBS FT140WWH torch applied (heat welded).
- 6. Optional Surfacing: 3M Brand number 11 roofing granules applied at a minimum coverage rate of 50 lbs./sq. OR roofing gravel ballast applied at a minimum coverage rate of 400 lbs./sq.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered

by these listings.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0571, WHI-495-111592, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28729

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (AC-3) Maximum Slope 1/2:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 3. Optional: 1-Ply Superflex SBS SF160PSA fully adhered with ASTM D312 roofing asphalt, hot mopped, or Fastorch FT160CSA or Fastorch SBS FT120CSA torch welded.
- 4. 1-, 2- Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. 1-Ply Fireguard SBS FG90GWH, or Fireguard SBS FG160CWH cap sheet; fully adhered with ASTM D3019 cold process adhesive or ASTM D312 roofing asphalt, hot mopped.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Value
07 50 00 Membrane Roofing
Combustible
Class A
1/2:12
LISTED
WHI-495-R-0571, WHI-495-111592, 100990697MID-001
UBC 15-2 (1994)
NFPA 256 (2003)
FM 4470 Section 5.1.A
UL 790 (2004)
ASTM E108 (2010a)
Certification
ROOF COVERING SYSTEMS



SPEC ID: 28730

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (AC-4) Maximum Slope 1/2:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite
  NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 3. 1-Ply Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive.
- 1-, 2- Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, Layflat SBS LF60W, OR 1-Ply Layflat SBS LF90CW; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. 1-Ply Supercap SBS SC85GWH, Supercap SBS SC100GWH, or Supercap SBS SC100WWH cap sheet; fully adhered with ASTM 3019 cold process adhesive or ASTM D312 roofing asphalt, hot mopped. Or 1-Ply Fastorch SBS FT140GWH or Fastorch SBS FT140WWH torch applied (heat welded).

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1/2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0588, WHI-495-111592, WHI-495-R-0786, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28731

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

### MBTechnology Combustible Deck (AC-5) Maximum Slope Unlimited

- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 1- or more Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, of Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive.
- 3. Optional: 1-Ply Superflex SBS SF160PSA or Fastorch SBS FT160CSA or Fastorch SBS FT120CSA fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 1-Ply Metalflex SBS MF160WAL, Metalflex SBS MF160WAL-CoolWhite24, Metalflex SBS MF160WAL-Custom Color, Metalflex SBS MF160WCU, or Metalflex SBS MF160WSS cap sheet; fully adhered with ASTM D312 roofing asphalt or torch weld.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference

number or code and the WHI Certification Mark.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	Unlimited
Listed or Inspected	LISTED
Report Number	WHI-495-R-0675, WHI-495-111592, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28887

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (AC-6) Maximum Slope 1:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite
  NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 3. 1-Ply Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive.
- 2-, 3-Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. Coated with ASTM D1227 asphalt emulsion at a minimum coverage rate of 3 gal./sq.
- 6. Optional Surfacing: 3M Brand number 11 roofing granules applied at a minimum coverage rate of 50 lbs./sq. OR roofing gravel ballast applied at a minimum coverage rate of 400 lbs./sq.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof
  Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0571, WHI-495-111592, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28888

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (AC-7) Maximum Slope 1/2:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite
  NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 1-Ply Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 1-, 2-Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, Layflat SBS LF60W, or 1-Ply Layflat SBS LF90CW; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. 1-Ply Fireguard SBS FG90GWH or Fireguard SBS FG160CWH cap sheet; fully adhered with ASTM D3019 cold process adhesive or ASTM D312 roofing asphalt, hot mopped.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof
  Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1/2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0588, WHI-495-111592, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28889

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

### MBTechology Combustible Deck (AC-8) Maximum Slope 1/2:12

- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 2. 1 or more Plies Layflat SBS LF25, Layfast SBS TU35, or Layflat SBS LF25W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 3. 1 or more Plies Layflat SBS LF50, or Layflat SBS LF50W; fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 4. 1-Ply Supercap SBS SC100GWH or Supercap SBS SC100WWH cap sheet; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive. Or 1-Ply Fastorch SBS FT140GWH or Fastorch SBS FT140WWH torch applied (heat welded).

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	<u>Value</u>
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1/2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0588, WHI-495-111592, WHI-495-R-0786, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28890

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (AC-9) Maximum Slope 1/2:12

- 1. 1-Ply Layflat SBS LF60, Layfast SBS TU70 or Layflat SBS LF60W; mechanically fastened.
- 2. 1-Ply Layflat SBS LF60, Layfast SBS TU70 or Layflat SBS LF60W; fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 3. 1-Ply Superflex SBS SF160PSA cap sheet; fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 4. Surfacing: Roofing gravel ballast applied at a minimum coverage rate of 400 lbs./sq.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications A, B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference number or code and the WHI Certification Mark.

<u>Attribute</u> CSI Code Roofing: Deck Type

<u>Value</u> 07 50 00 Membrane Roofing Combustible

Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1/2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0588, WHI-495-111592, WHI-495-R-0786, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 29099

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

### **PRODUCT DESCRIPTION**

#### MBTechnology Non-Combustible Roofing Deck ANC-01.

#### **Class A - Non-Combustible Deck**

Maximum Slope - 1:12

Deck - 22 ga. Type B, Grade 33 Steel or concrete Deck Span - 6 gt o.c. Deck Attachment - 6" o.c. using TEK/5 screws or per NRCA recommendations Insulation - ISO, Atlas Insulation Thickness - 1-1/2" Insulation Attachment - Olympic, 3" plates and screws Cover Board - Dens Deck Primed Cover Board Thickness - 1/2" Cover Board Attachment - OlyBond Base Membrane - FT160CSART Base Base Membrane - Heat weld Cap Membrane - FGFT160CWH Cap Cap Membrane - Heat weld

Note: The component materials of each system must be applied in the order in which they are listed above.

**Testing Standards** 

#### ASTM E108 (2010a)

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	<u>Value</u>
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Non-Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1:12



Listed or Inspected Report Number Criteria Intertek Services Listing Section Test Original Issue Date LISTED 100200275MID-003 ASTM E108 (2010a) Certification ROOF COVERING SYSTEMS August 30th, 2010



SPEC ID: 28891

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

### **PRODUCT DESCRIPTION**

### MBTechnology Non-Combustible Roofing Deck ANC-02.

#### **Class A - Non-Combustible Deck**

Maximum Slope - 1/2:12

Deck - Non-combustible Steel or Concrete Deck Attachment - Per NRCA recommendations Base Membrane - Layfast SBS TU35, Layflat SBS LF25, or Layflat SBS LF25W, mechanically fastened Inter-Ply Membrane Attachment - FT160CSART, heat welded Cap Membrane - FGFT160CWH Cap, heat welded.

# Note: The component materials of each system must be applied in the order in which they are listed above.

#### **Testing Standards**

#### ASTM E108 (2010a)

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Non-Combustible
Roofing: Fire Rating	Class A
Roofing: Maximum Slope	1/2:12
Listed or Inspected	LISTED
Report Number	100200275MID-003, 100990697MID-001
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS
Test Original Issue Date	August 30th, 2010



SPEC ID: 28732

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Combustible Deck (BC-1) Maximum Slope 1-1/2:12

- 1. Optional: Glass Fiber Taped Joints
- Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, or EPS/perlite composite NOTE: When EPS insulation is applied over a metal or combustible deck, a thermal barrier complying with section 2603.4.1.5 or applicable current section of the IBC is required.
- 3. 1-Ply Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive.
- 1-, 2-Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, Layflat SBS LF60W, or 1-Ply Layflat SBS LF90CW; fully adhered with ASTM D312 roofing asphalt, hot mopped, or ASTM D3019 cold process adhesive, each ply.
- 5. 1-Ply Supercap SBS SC85GWH cap sheet; fully adhered with ASTM D3019 cold process adhesive or ASTM D312 roofing asphalt, hot mopped.
- 6. Surfacing: Roofing gravel or crushed stone applied at a minimum coverage rate of 400 lbs./sq. or crushed slag applied at a minimum coverage rate of 300 lbs./sq. used as a surface over a flood coat of hot roofing asphalt.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

<u>Attribute</u>	Value
CSI Code	07 50 00 Membrane Roofing
Roofing: Deck Type	Combustible
Roofing: Fire Rating	Class B
Roofing: Maximum Slope	1-1/2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0571, WHI-495-111592, 100990697MID-001
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28892

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

#### **PRODUCT DESCRIPTION**

#### MBTechnology Combustible Roofing Deck BC-2.

#### **Class B - Combustible Deck**

Maximum Slope - 1:12

Deck - Plywood\* Deck Attachment - Per NRCA recommendations Base Membrane - Layfast SBS TU35, Layflat SBS LF25, or Layflat SBS LF25W, mechanically fastened Inter-Ply Membrane Attachment - FT160CSART, heat welded Cap Membrane - FGFT160CWH Cap, heat welded.

# Note: The component materials of each system must be applied in the order in which they are listed above.

Testing Standards

ASTM E108 (2010)

\*Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference number or code and the WHI Certification Mark.

<u>Attribute</u> CSI Code Roofing: Deck Type Roofing: Fire Rating <u>Value</u> 07 50 00 Membrane Roofing Combustible Class B



Roofing: Maximum Slope	1:12
Listed or Inspected	LISTED
Report Number	100200275MID-003c, 100990697MID-001
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS
Test Original Issue Date	August 30th, 2010



SPEC ID: 28893

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Non-Combustible Roofing Deck (BNC-1) Maximum Slope 2:12

- 1. Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, or polyisocyanurate
- 1-, 2- Plies Layflat SBS LF25, Layfast SBS TU35, Layflat SBS LF25W, Layflat SBS LF40, Layfast SBS TU43, Layflat SBS LF40W, Layflat SBS LF60, Layfast SBS TU70, or Layflat SBS LF60W; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped, or lap cement (ASTM D3019) OR 1-, 2- Plies Fastorch SBS FT120GSA; heat fused.
- 3. 1-Ply Fireguard SBS FG160CWH cap sheet; fully adhered with ASTM D312 roofing asphalt, hot mopped, or heat fused.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### **Evaluated to the following:**

The roof covering systems in this section have been evaluated for external fire resistance Classifications B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference number or code and the WHI Certification Mark.

<u>Attribute</u> CSI Code Value 07 50 00 Membrane Roofing Roofing: Deck Type Roofing: Fire Rating Roofing: Maximum Slope Listed or Inspected Report Number Criteria Criteria Criteria Criteria Intertek Services Listing Section Non-Combustible Class B 2:12 LISTED WHI-495-R-0588-B, WHI-495-040595, 100990697MID-001 UBC 15-2 (1994) NFPA 256 (2003) FM 4470 Section 5.1.A UL 790 (2004) ASTM E108 (2010a) Certification ROOF COVERING SYSTEMS



SPEC ID: 28894

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Non-Combustible Roofing Deck (BNC-2) Maximum Slope 2:12

- 1. Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, or polyisocyanurate
- 2. 1-Ply Fastorch SBS FT120GSA; heat fused.
- 3. 1-Ply Fireguard SBS FG160CWH; fully adhered with ASTM D312 roofing asphalt, hot mopped, or heat fused.

# Note: The component materials of each system must be applied in the order in which they are listed above.

#### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference number or code and the WHI Certification Mark.

<u>Attribute</u> CSI Code Roofing: Deck Type Roofing: Fire Rating Value 07 50 00 Membrane Roofing Non-Combustible Class B



Roofing: Maximum Slope	2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0588-B, WHI-495-040595
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



SPEC ID: 28895

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

MBTechnology Non-Combustible Roofing Deck (BNC-3) Maximum Slope 2:12

- 1. Optional Insulation's: Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, or polyisocyanurate
- 2. 1-, 2- Plies Fastorch SBS FT120PSA; mechanically fastened or fully adhered with ASTM D312 roofing asphalt, hot mopped.
- 3. 1-Ply Fireguard SBS FG160CWH; fully adhered with ASTM D312 roofing asphalt, hot mopped, or heat fused.

# Note: The component materials of each system must be applied in the order in which they are listed above.

### Evaluated to the following:

The roof covering systems in this section have been evaluated for external fire resistance Classifications B, C as outlined by the following test methods:

- ASTM-E108 American Society for Testing & Materials 'Standard Methods of Fire Test of Roof Covering'
- FM-4470, Section 5.1.A Factory Mutual 'Standard Method of Test for Fire Resistance of Roof Covering Materials'
- NFPA-256 National Fire Protection 'Standard Method of Fire Tests of Roof Covering'
- UBC-15-2-94 Uniform Building Code 'Test Standard for Determining the Fire Retardancy of Roof Covering Materials'
- ULC-S107 Underwriters' Laboratories of Canada 'Standard Method of Tests for Fire Resistance of Roof Covering Materials'
- UL-790 Underwriters' Laboratories Inc. 'Tests for Fire Resistance of Roof Covering Materials'

Each system listing identifies the deck substrate as either non-combustible or combustible. Systems evaluated for combustible decks will provide the same ratings when applied over non-combustible decks. Unless otherwise noted in individual listings, combustible decks shall be sheathed with a minimum 15/32" veneer plywood or minimum 7/16" non-veneer APA rated sheathing panel (oriented strand board panels, structural particleboard panels, composite panels or wafer-board panels) or 3/4" thick solid wood sheathing boards. The component materials of each system must be applied in the order in which they are listed. All components of the system must be listed for external fire exposure by an agency acceptable to the AHJ.

Some Roof Covering Systems have been evaluated for other performance characteristics, in addition to external fire exposure. Where applicable, such additional performance characteristics are noted within the specific listing.

In all cases, manufacturer's instructions should be consulted for installation procedures and details not covered by these listings.

Listed Materials are identified by a label or marking bearing the wording, "Listed Roofing Component", a reference number or code and the WHI Certification Mark.

<u>Attribute</u> CSI Code Roofing: Deck Type Value 07 50 00 Membrane Roofing Non-Combustible

Roofing: Fire Rating	Class B
Roofing: Maximum Slope	2:12
Listed or Inspected	LISTED
Report Number	WHI-495-R-0588, WHI-495-040595
Criteria	UBC 15-2 (1994)
Criteria	NFPA 256 (2003)
Criteria	FM 4470 Section 5.1.A
Criteria	UL 790 (2004)
Criteria	ASTM E108 (2010a)
Intertek Services	Certification
Listing Section	ROOF COVERING SYSTEMS



## LISTING INFORMATION OF MBTechnology Roofing Materials - Underlayment

SPEC ID: 27921

MBTechnology 188 S. Teilman Avenue Fresno, CA 93706

Roofing Underlayment/Base, layfast SBS Series, Model Nos. TU35, TU43, TU70. Testing Standards: ASTM-D4601, ASTM-D226, ASTM-D4869, ICC-ES-AC 165 (paragraph 3.2).

Attribute CSI Code Listed or Inspected Report Number Criteria Criteria Criteria Intertek Services Listing Section

Value 07 30 05 Roofing Felt and Underlayment LISTED On File at Intertek ASTM D226 (2006) ASTM D4601 ASTM D4869 Certification ROOFING MATERIALS