

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
1	Wood	New or Reroof (Tear-Off)	G	Air-Sealed Deck, Air-Sealed Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	2
2A	Steel	New or Reroof (Tear-Off)	C	Air Sealed Deck, Mechanically Attached Insulation, Bonded Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	3-4
2B	Steel	New	G	Air Sealed Deck, Spray-Applied Insulation, Air-Sealed Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	5
3A	Structural concrete	New or Reroof (Tear-Off)	G	Air Sealed Deck, Optional Insulation, Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	6
3B	Structural concrete	New or Reroof (Tear-Off)	G	Deck Waterproofing, Optional Insulation, Roof Cover, Pressure Equalizing Vent	6
3C	Structural concrete	New or Reroof (Tear-Off)	G	Air Sealed Deck, Vapor Barrier, Optional Insulation, Coverboard, Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	7
4A	Concrete	Recover	G	Air Sealed Deck, Optional Insulation, Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	8
4B	Concrete	Recover	G	Air Sealed Deck, Vapor Barrier, Optional Insulation, Coverboard, Roof Cover, KELLY CO-2001 "EQUALIZER VALVES"	8-9

The following notes apply to the systems outlined herein:

- The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- Fasteners shall be of sufficient length for the following engagements:
 - Wood Deck: Minimum 0.75-inch plywood penetration or minimum 1-inch wood plank embedment.
 - Steel Deck: Minimum 0.75-inch steel penetration and engage the top flute of the steel deck.
 - Structural concrete: Minimum 1-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions.
- Unless otherwise noted, insulation may be any one layer or combination of polyisocyanurate, polystyrene, wood fiberboard, perlite, gypsum-based roof board or mineral wool roof board that meets the QA requirements of F.A.C. Rule 61G20-3 and is documented as meeting FBC 1505.1 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16, and Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria, or an alternate system that meets Zone 2/3 pressure requirements. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016) for Zone 2/3 enhancements.
- For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
- "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609 for determination of design wind pressures.

**TABLE 1: WOOD DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE G: AIR-SEALED DECK, AIR-SEALED ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"**

System No.	Deck (Note 1)	Insulation	Roof Cover			MDP (psf)
			Type	Air Seal	Valve	
W-1.	New Construction or Re-Roof (Tear-Off): Min. 15/32-inch APA rated plywood	FBC Approved, UL Classified two-component spray applied foamed plastic; formed in two or more layers, min ½-inch thick each, with 2001 Reinforced Fiberglass Mesh (not UL Classified) laid over first layer	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)"	<p>The perimeter and penetrations are sealed with a mechanically fastened, picture frame of Kelly Co-2001 Inc. termination bars, consisting of:</p> <ul style="list-style-type: none"> ✓ 2001 butyl rubber gasket (nominal 5/8" x ¾" cross-section) and termination bars consisting of ½" wide x 6 ft. long extruded aluminum bars. The gasket is centered on the underside of the membrane on the substrate. A termination bar is fastened over the membrane to the deck with 1/4-13 steel screws spaced 7" o.c. through pre-punched holes. or ✓ 2001 butyl rubber gasket (nominal 5/8" x ¾" cross-section) and termination strips consisting of min. 7/16" thick x 6" wide strips of APA rated wood sheathing. The gasket is centered on the underside of the membrane on the substrate. A termination strip is fastened over the membrane to the deck with FBC Approved #14 screws and 3" diameter galvalume metal stress plates spaced 12" o.c. 	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-60.0
W-2.	<p>New Construction: Min. 7/16-inch APA rated plywood or OSB; The longitudinal sides parallel to and centered over wood joists, spaced 24-inch o.c. Butt joints of adjacent sheets are to be staggered.</p> <p>Kelly Co-2001 petroleum-based exterior wood deck adhesive is used to adhere sheathing to joists and to seal all deck joints.</p> <p>Fastening consist of FBC Approved #14 screws and 3" diameter galvalume metal stress plates located in a row at the longitudinal seams of sheathing beginning 4 in. from each staggered butt seam and 20-inch o.c. Another row is located at the longitudinal center line of each sheet, 4-inch from each butt edge and 22-inch o.c.</p>	(Optional) UL Classified, FBC Approved separator mats or slip sheets, or rigid roof insulation, any thickness, adhered, mechanically attached or loose laid	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)"	<p>The perimeter and penetrations are sealed with a mechanically fastened, picture frame of Kelly Co-2001 Inc. termination bars, consisting of:</p> <ul style="list-style-type: none"> ✓ 2001 butyl rubber gasket (nominal 5/8" x ¾" cross-section) and termination bars consisting of ½" wide x 6 ft. long extruded aluminum bars. The gasket is centered on the underside of the membrane on the substrate. A termination bar is fastened over the membrane to the deck with 1/4-13 steel screws spaced 7" o.c. through pre-punched holes. or ✓ 2001 butyl rubber gasket (nominal 5/8" x ¾" cross-section) and termination strips consisting of min. 7/16" thick x 6" wide strips of APA rated wood sheathing. The gasket is centered on the underside of the membrane on the substrate. A termination strip is fastened over the membrane to the deck with FBC Approved #14 screws and 3" diameter galvalume metal stress plates spaced 12" o.c. 	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-97.5

TABLE 2A: STEEL DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE C: AIR SEALED DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"

System No.	Deck (Note 1)	Air Seal	Base Insulation	Top Insulation			Roof Cover			MDP (psf)
				Type	Fasteners	Attach	Type	Attach	Valve	
S-1.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	Anu UL Classified, FBC Approved polyisocyanurate insulation and/or gypsum-based coverboard	Min. 7/16-inch APA rated OSB	Carlisle "Sure-Seal HP Fastener"	1 per 4 ft ²	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough" or "Sure-Tough FR"	Carlisle "Sure-Seal 90-8-30A Bonding Adhesive", contact application at 1.67 gal/square	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-30.0
S-2.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	Anu UL Classified, FBC Approved polyisocyanurate insulation and/or gypsum-based coverboard	Min. 7/16-inch APA rated OSB	Carlisle "Sure-Seal HP Fastener"	1 per 4 ft ²	Carlisle "Sure-Weld" or "Sure-Weld EXTRA"	Carlisle "Sure-Weld Bonding Adhesive", contact application at 1.67 gal/square	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-30.0
S-3.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, HP-W, H-Shield, ACFoam II, ACFoam III, H-Shield CG, ENRGY 3, PSI-25, Multi-Max FA-3	Additional layer(s) base insulation and/or min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Carlisle "Sure-Seal HP Fastener" with "Sure-Seal Insulation Plate"	1 per 2 ft ²	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough" or "Sure-Tough FR"	Carlisle "Sure-Seal 90-8-30A Bonding Adhesive", contact application at 1.67 gal/square	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-45.0
S-4.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield, ACFoam II, SecurShield, H-Shield CG, ENRGY 3	Additional layer(s) base insulation and/or min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Carlisle "Sure-Seal HP Fastener" with "Sure-Seal Insulation Plate"	1 per 2 ft ²	Carlisle "Sure-Weld" or "Sure-Weld EXTRA"	Carlisle "Sure-Weld Bonding Adhesive", contact application at 1.67 gal/square	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-45.0

TABLE 2A: STEEL DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)										
SYSTEM TYPE C: AIR SEALED DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"										
System No.	Deck (Note 1)	Air Seal	Base Insulation	Top Insulation			Roof Cover			MDP (psf)
				Type	Fasteners	Attach	Type	Attach	Valve	
S-5.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	(Optional) Min. 1.5-inch ACfoam II or Sarnatherm(a)	Additional layer(s) base insulation and/or min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	OMG Heavy Duty with OMG Flat Bottom Metal Plate or Sarnafastener #14 with Sarnaplate	1 per 2 ft ²	"KELLY CPA (PVC)" or "2001 CPA (PVC)"	"Sarnacol 2121", wet-lay application at 0.75 to 2.25 gal/sq. or "Sarnacol 2170", contact application at 1.25 gal/sq	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-45.0
S-6.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	Anu UL Classified, FBC Approved polyisocyanurate insulation and/or gypsum-based coverboard	Min. 7/16-inch APA rated OSB	Carlisle "Sure-Seal HP Fastener" with "Sure-Seal Insulation Plate"	1 per 3.2 ft ²	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough" or "Sure-Tough FR"	Carlisle "Sure-Seal 90-8-30A Bonding Adhesive", contact application at 1.67 gal/square	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-52.5
S-7.	Min. 22 ga., type B, 33 ksi steel	Minimum min 4 mil Kelly Co-2001, Inc. reinforced polyethylene with end and lap seams overlapped min 6 in., and sealed with 2 in. wide pressure sensitive tape. The poly air barrier must be of sufficient size to wrap over the top of the insulation or cover board, a min of 6 in., around the entire perimeter and at penetrations, to be air sealed to the roof cover.	Anu UL Classified, FBC Approved polyisocyanurate insulation and/or gypsum-based coverboard	Min. 7/16-inch APA rated OSB	Carlisle "Sure-Seal HP Fastener" with "Sure-Seal Insulation Plate"	1 per 3.2 ft ²	Carlisle "Sure-Weld" or "Sure-Weld EXTRA"	Carlisle "Sure-Weld Bonding Adhesive", contact application at 1.67 gal/square	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-52.5

TABLE 2B: STEEL DECKS - NEW CONSTRUCTION
SYSTEM TYPE G: AIR SEALED DECK, SPRAY-APPLIED INSULATION, AIR-SEALED ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"

System No.	Deck (Note 1)	Air Seal	Insulation	Roof Cover			MDP (psf)
				Type	Air Seal	Valve	
S-8.	Min. 22 ga., type B, 33 ksi steel	Side-lap and butt seams sealed with two component spray-applied foamed plastic.	FBC Approved, UL Classified two-component spray applied foamed plastic; min 1 in. thick sprayed over 2001 Reinforced Fiberglass Mesh stretched across steel deck	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)"	<p>The perimeter and penetrations are sealed with a mechanically fastened, picture frame of Kelly Co-2001 Inc. termination bars, consisting of:</p> <ul style="list-style-type: none"> ✓ 2001 butyl rubber gasket (nominal 5/8" x 3/4" cross-section) and termination bars consisting of 1/2" wide x 6 ft. long extruded aluminum bars. The gasket is centered on the underside of the membrane on the substrate. A termination bar is fastened over the membrane to the deck with 1/4-13 steel screws spaced 7" o.c. through pre-punched holes. or ✓ 2001 butyl rubber gasket (nominal 5/8" x 3/4" cross-section) and termination strips consisting of min. 7/16" thick x 6" wide strips of APA rated wood sheeting. The gasket is centered on the underside of the membrane on the substrate. A termination strip is fastened over the membrane to the deck with FBC Approved #14 screws and 3" diameter galvalume metal stress plates spaced 12" o.c. 	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-112.5

**TABLE 3A: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE G: AIR SEALED DECK, OPTIONAL INSULATION, ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"**

System No.	Deck (Note 1)	Perimeter Air Seal	Deck Air Seal	Insulation	Roof Cover		MDP (psf)
					Type	Valve	
C-1	Structural concrete	Minimum 18-inch wide strips min 4 mil reinforced polyethylene or Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)" adhered to the concrete deck at the entire perimeter with KELLY CO-2001, INC. specified adhesive or sealant. Air seal should be bonded so as to permit wrapping over the top of any insulation or barrier board, a min of 6 inches.	Any joints or holes through the roof deck are sealed in accordance with KELLY CO-2001, INC. specifications.	(Optional) Any UL Classified, FBC Approved roof insulation and/or coverboard combination, any thickness, loose-laid with staggered joints	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)"	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-75.0

**TABLE 3B: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE G: DECK WATERPROOFING, AIR SEALED DECK, OPTIONAL INSULATION, ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"**

System No.	Deck (Note 1)	Deck Waterproofing	Air Seal	Insulation	Roof Cover		MDP (psf)
					Type	Valve	
C-2	Structural concrete	UL Classified roof coating or liquid applied roof system, FBC Approved for use over concrete deck, applied in accordance with the manufacturer's Florida Product Approval or UL Classified, ASTM D6164, polyester reinforced, SBS modified bitumen roof cover, FBC Approved for use over concrete deck, installed in accordance with the manufacturer's Florida Product Approval or UL Classified, spray-applied polyurethane foam roof system, FBC Approved for use over concrete deck, installed in accordance with the manufacturer's Florida Product Approval.	Air Seal: Minimum 18 in. wide strips of Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)", adhered or mechanically terminated to the roof deck, in a bead of air seal caulking or tape, with a continuous series of Kelly Co-2001, Inc. termination bar around the perimeter and penetrations. The air seal strips are extended up through the roof assembly, and are heat-welded to the underside of the roof cover	(Optional) UL Classified, FBC Approved separator mats or slip sheets, or rigid roof insulation, any thickness, adhered, mechanically attached, or loose laid, followed by 0.5-inch thick, UL Classified, FBC Approved gypsum-based roof coverboard, adhered, mechanically attached, or loose laid.	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)"	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-112.5

TABLE 3C: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE G: AIR SEALED DECK, OPTIONAL VAPOR BARRIER, OPTIONAL INSULATION, ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"

System No.	Deck (Note 1)	Deck Air Seal	Vapor Barrier	Insulation	Coverboard	Roof Cover				MDP (psf)
						Type	Attach	Perimeters & Penetrations	Valve	
C-3	Structural concrete	Perimeter roof deck to vertical wall joints, through-roof-deck penetrations and deck joints are air sealed with Carlisle "Sure-Tough", or "Sure-Tough FR" fully adhered to the roof deck and flashed on to the perimeter and through deck penetrations.	(Optional) Siplast "Paradiene 20 TG", torch-applied followed by Siplast "Paradiene 30 FR TG", torch-applied	(Optional) UL Classified, FBC Approved rigid roof insulation, any thickness, mechanically attached or loose-laid.	Min. 0.5-inch Dens Deck, SECUROCK Glass-Mat Roof Board	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough" or "Sure-Tough FR"	Loose laid or adhered in Carlisle "Sure-Seal 90-8-30A Bonding Adhesive", contact application at 1.67 gal/square. The membrane is directly terminated (secured) to the concrete deck with KELLY CO-2001, INC. air seal termination techniques using butyl gum tape and termination bars, or structural "C" Channels fastened with FBC Approved concrete fasteners 6-in o.c. at perimeters and all roof penetrations	Finish flashed onto the air sealed field of the roof membrane in accordance with KELLY CO-2001, INC. published requirements	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-142.5
C-4	Structural concrete	Perimeter roof deck to vertical wall joints, through-roof-deck penetrations and deck joints are air sealed with Carlisle "Sure-Weld" or "Sure-Weld EXTRA" fully adhered to the roof deck and flashed on to the perimeter and through deck penetrations.	(Optional) Siplast "Paradiene 20 TG", torch-applied followed by Siplast "Paradiene 30 FR TG", torch-applied	(Optional) UL Classified, FBC Approved rigid roof insulation, any thickness, mechanically attached or loose-laid.	Min. 0.5-inch Dens Deck, SECUROCK Glass-Mat Roof Board	Carlisle "Sure-Weld" or "Sure-Weld EXTRA"	Loose laid or adhered in Carlisle "Sure-Weld Bonding Adhesive", contact application at 1.67 gal/square. The membrane is directly terminated (secured) to the concrete deck with air seal termination techniques using butyl gum tape and termination bars or structural "C" Channels fastened with FBC Approved concrete fasteners 6-in o.c. at perimeters and all roof penetrations	Finish flashed onto the air sealed field of the roof membrane in accordance with KELLY CO-2001, INC. published requirements	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-142.5
C-5	Structural concrete	Perimeter roof deck to vertical wall joints, through-roof-deck penetrations and deck joints are air sealed with "KELLY CPA (PVC)" or "2001 CPA (PVC)" fully adhered to the roof deck and flashed on to the perimeter and through deck penetrations.	(Optional) Siplast "Paradiene 20 TG", torch-applied followed by Siplast "Paradiene 30 FR TG", torch-applied	(Optional) UL Classified, FBC Approved rigid roof insulation, any thickness, mechanically attached or loose-laid.	Min. 0.5-inch Dens Deck, SECUROCK Glass-Mat Roof Board	"KELLY CPA (PVC)" or "2001 CPA (PVC)"	Loose laid or adhered in "Sarnacol 2121", wet-lay application at 0.75 to 2.25 gal/sq. or "Sarnacol 2170", contact application at 1.25 gal/sq. The membrane is directly terminated (secured) to the concrete deck with air seal termination techniques using butyl gum tape and termination bars or structural "C" Channels fastened with FBC Approved concrete fasteners 6-in o.c. at perimeters and all roof penetrations	Finish flashed onto the air sealed field of the roof membrane in accordance with KELLY CO-2001, INC. published requirements	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-142.5

TABLE 4A: RECOVER APPLICATIONS, CONCRETE DECK
SYSTEM TYPE G: AIR SEALED EXISTING ROOF, OPTIONAL INSULATION, ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"

System No.	Substrate (Note 12)	Perimeter Air Seal	Deck Air Seal	Insulation	Roof Cover		MDP (psf)
					Type	Valve	
R-1	Existing UL Classified roof assembly over structural concrete	Minimum 18-inch wide strips min 4 mil reinforced polyethylene or Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)" adhered to the concrete deck at the entire perimeter with KELLY CO-2001, INC. specified adhesive or sealant. Air seal should be bonded so as to permit wrapping over the top of any insulation or barrier board, a min of 6 inches.	Any joints or holes through the existing roof are sealed in accordance with KELLY CO-2001, INC. specifications.	(Optional) Any UL Classified, FBC Approved roof insulation and/or coverboard combination, any thickness, loose-laid with staggered joints	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough", "Sure-Tough FR", "Sure-Weld" or "Sure-Weld EXTRA" or "KELLY CPA (PVC)" or "2001 CPA (PVC)"	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-75.0

TABLE 4B: RECOVER APPLICATIONS, CONCRETE DECK
SYSTEM TYPE G: AIR SEALED DECK, OPTIONAL INSULATION, ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"

System No.	Substrate (Notes 1 & 12)	Deck Air Seal	Gravel Mat	Insulation	Coverboard	Roof Cover				MDP (psf)
						Type	Attach	Perimeters & Penetrations	Valve	
R-2	Existing UL Classified roof assembly over structural concrete	Perimeter roof deck to vertical wall joints, through-roof-deck penetrations and deck joints are air sealed with Carlisle "Sure-Tough", or "Sure-Tough FR" fully adhered to the roof deck and flashed on to the perimeter and through deck penetrations.	(Optional) Loose laid gravel mat	(Optional) UL Classified, FBC Approved rigid roof insulation, any thickness, mechanically attached or loose-laid.	Min. 0.5-inch Dens Deck, SECUROCK Glass-Mat Roof Board	Carlisle "Sure-Seal FR Nonreinforced", "Sure-White", "Sure-Tough" or "Sure-Tough FR"	Loose laid or adhered in Carlisle "Sure-Seal 90-8-30A Bonding Adhesive", contact application at 1.67 gal/square. The membrane is directly terminated (secured) to the concrete deck with KELLY CO-2001, INC. air seal termination techniques using butyl gum tape and termination bars, or structural "C" Channels fastened with FBC Approved concrete fasteners 6-in o.c. at perimeters and all roof penetrations	Finish flashed onto the air sealed field of the roof membrane in accordance with KELLY CO-2001, INC. published requirements	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-142.5
R-3	Existing UL Classified roof assembly over structural concrete	Perimeter roof deck to vertical wall joints, through-roof-deck penetrations and deck joints are air sealed with Carlisle "Sure-Weld" or "Sure-Weld EXTRA" fully adhered to the roof deck and flashed on to the perimeter and through deck penetrations.	(Optional) Loose laid gravel mat	(Optional) UL Classified, FBC Approved rigid roof insulation, any thickness, mechanically attached or loose-laid.	Min. 0.5-inch Dens Deck, SECUROCK Glass-Mat Roof Board	Carlisle "Sure-Weld" or "Sure-Weld EXTRA"	Loose laid or adhered in Carlisle "Sure-Weld Bonding Adhesive", contact application at 1.67 gal/square. The membrane is directly terminated (secured) to the concrete deck with air seal termination techniques using butyl gum tape and termination bars or structural "C" Channels fastened with FBC Approved concrete fasteners 6-in o.c. at perimeters and all roof penetrations	Finish flashed onto the air sealed field of the roof membrane in accordance with KELLY CO-2001, INC. published requirements	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-142.5

**TABLE 4B: RECOVER APPLICATIONS, CONCRETE DECK
SYSTEM TYPE G: AIR SEALED DECK, OPTIONAL INSULATION, ROOF COVER, KELLY CO-2001 "EQUALIZER VALVES"**

System No.	Substrate (Notes 1 & 12)	Deck Air Seal	Gravel Mat	Insulation	Coverboard	Roof Cover				MDP (psf)
						Type	Attach	Perimeters & Penetrations	Valve	
R-4	Existing UL Classified roof assembly over structural concrete	Perimeter roof deck to vertical wall joints, through-roof-deck penetrations and deck joints are air sealed with "KELLY CPA (PVC)" or "2001 CPA (PVC)" fully adhered to the roof deck and flashed on to the perimeter and through deck penetrations.	(Optional) Loose laid gravel mat	(Optional) UL Classified, FBC Approved rigid roof insulation, any thickness, mechanically attached or loose-laid.	Min. 0.5-inch Dens Deck, SECUROCK Glass-Mat Roof Board	"KELLY CPA (PVC)" or "2001 CPA (PVC)"	Loose laid or adhered in "Sarnacol 2121", wet-lay application at 0.75 to 2.25 gal/sq. or "Sarnacol 2170", contact application at 1.25 gal/sq. The membrane is directly terminated (secured) to the concrete deck with air seal termination techniques using butyl gum tape and termination bars or structural "C" Channels fastened with FBC Approved concrete fasteners 6-in o.c. at perimeters and all roof penetrations	Finish flashed onto the air sealed field of the roof membrane in accordance with KELLY CO-2001, INC. published requirements	Kelly Co-2001, Inc. "Equalizer Valves" installed in accordance with KELLY CO-2001, INC. published requirements	-142.5