

Oshkosh AeroTech Jetway® Corrugated Boarding Bridge



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JETWAY SYSTEMS®
For the Perfect Turn

Jetway® Corrugated Boarding Bridge Technical Specifications

General Arrangements

The Apron Drive Bridge consists of the following:

- A. Rotunda and Corridor
- B. Tunnel Sections
- C. Drive Column
- D. Service Door, landing
- E. Cab Bubble

Models

Oshkosh AeroTech offers a number of two- or three-tunnel apron drive bridge models.

Capable of serving any of today's commercial aircraft, Apron Drive bridge model numbers represent measured length of the bridge from the center of the rotunda to the end of the cab spacer at full retraction and full extension. The A3 68/141 model, for example is a three tunnel Apron Drive measuring 67' 1" at full retraction and 141 feet at full extension.

Two-Tunnel Models:

Model	Fully Extended	Fully Retracted	Travel	Max OP Limit	Min OP Limit
A2-41/56	56' 0" (17.08m)	40' 10" (12.46m)	15' 2" (4.62m)	41' 0" (12.50m)	34' 0" (10.36m)
A2-43/59	59' 0" (18.0m)	42' 10" (13.07m)	16' 2" (4.93m)	44' 0" (13.41m)	36' 0" (10.97m)
A2-45/63	63' 0" (19.21m)	44' 10" (13.68m)	18' 2" (5.54m)	48' 0" (14.63m)	38' 0" (11.58m)
A2-47/66	66' 0" (20.13m)	46' 10" (14.29m)	19' 2" (5.84m)	51' 0" (15.544m)	40' 0" (12.19m)
A2-49/70	70' 0" (21.35m)	48' 10" (14.90m)	21' 2" (6.45m)	55' 0" (16.76m)	42' 0" (12.80)
A2-51/73	73' 0" (22.26m)	50' 10" (15.51m)	22' 2" (6.76m)	58' 0" (17.68m)	44' 0" (13.41m)
A2-53/77	77' 0" (23.48m)	52' 10" (16.12m)	24' 2" (7.37m)	62' 0" (18.90m)	46' 0" (14.02m)
A2-55/80	80' 0" (24.40m)	54' 10" (16.73m)	25' 2" (7.67m)	65' 0" (19.81m)	48' 0" (14.63m)
A2-57/84	84' 0" ² (25.62)	56' 10" (17.34m)	27' 2" (8.28m)	69' 0" (21.03m)	50' 0" (15.24m)
A2-59/87	87' 0" (26.53m)	58' 10" ² (17.944m)	28' 2" (8.59m)	72' 0" (21.95m)	52' 0" (15.85m)
A2-61/91	91' 0" (27.75m)	60' 10" (18.55m)	30' 2" (9.19m)	76' 0" (23.16m)	54' 0" (16.46m)
A2-63/95	95' 0" (28.97m)	62' 10" (19.16m)	32' 2" (9.80m)	80' 0" (24.38m)	56' 0" (17.07m)
A2-65/99	99' 0" (30.19m)	64' 10" (19.77m)	34' 2" (10.41m)	84' 0" (25.60m)	58' 0" (17.68m)
A2-68/103	103' 0" (31.40m)	67' 10" (20.69m)	35' 2" (10.72m)	88' 0" (26.82m)	61' 0" (18.59m)
A2-70/107	107' 0" (32.63m)	69' 10" (21.30m)	37' 2" (11.33m)	92' 0" (28.04m)	63' 0" (19.20m)
A2-72/111	111' 0" (33.84m)	71' 10" (21.91m)	39' 2" (11.94m)	96' 0" (29.26m)	65' 0" (19.81m)
SA2-81/115	114' 10" (35.02m)	80' 10" (24.66m)	34' 0" (10.36m)	100' 0" (30.48m)	74' 0" (22.55m)
SA2-89/123	122' 10" (37.46m)	88' 10" (27.09m)	34' 0" (10.36m)	108' 0" (32.92m)	82' 0" (24.99m)
SA2-97/131	130' 10" (39.90m)	96' 10" (29.53m)	34' 0" (10.36m)	116' 0" (35.36m)	90' 0" (27.43m)
SA2-105/139	138' 10" (42.33m)	104' 10" (31.97m)	34' 0" (10.36m)	124' 0" (37.79m)	98' 0" (29.87m)
SA2-113/147	146' 10" (44.77m)	112' 10" (34.41m)	34' 0" (10.36m)	132' 0" (40.23m)	106' 0" (32.31m)
SA2-121/155	154' 10" (47.21m)	120' 10" (36.85m)	34' 0" (10.36m)	140' 0" (42.67m)	114' 0" (34.75m)

Three-Tunnel Models:

Model	Fully Extended	Fully Retracted	Travel	Max OP Limit	Min OP Limit
A3-44/78	78' 6" (23.94m)	42' 10" (13.07m)	35' 8" (10.87m)	63' 0" (19.20m)	36' 0" (10.97m)
A3-48/86	86' 6" (26.38m)	46' 10" (14.29m)	39' 8" (12.09m)	71' 0" (21.64m)	40' 0" (12.19m)
A3-50/95	95' 6" (29.12m)	49' 10" (15.20m)	45' 8" (13.92m)	80' 0" (24.38m)	43' 0" (13.11m)
A3-53/104	104' 6" (31.87m)	52' 10" (16.12m)	51' 8" (15.75m)	89' 0" (27.13m)	46' 0" (14.02m)
A3-58/110	110' 6" (33.69m)	56' 10" (17.34m)	53' 8" (16.36m)	95' 0" (28.96m)	50' 0" (15.24m)
A3-60/119	119' 6" (36.44m)	59' 10" (18.25m)	59' 8" (18.19m)	104' 0" (31.67m)	53' 0" (16.15m)
A3-64/131	131' 6" (40.09m)	63' 10" (19.47m)	67' 8" (20.62m)	116' 0" (33.36m)	57' 0" (17.37m)
A3-68/141	141' 1" (43.02m)	67' 1" (20.45m)	74' 0" (22.57m)	126' 0" (38.40m)	60' 0" (18.29m)
A3-72/150	150' 1" (45.76m)	71' 6" (21.80m)	78' 7" (23.96m)	135' 0" (41.15m)	64' 5" (19.63m)

Design Parameters

Minimum dimensions for all two tunnel and three tunnel Apron Drive Bridges:

Rotunda Interface Width	4'4"	(1.32m)
Height	7'7"	(2.31m)
Tunnels (Minimum "A" tunnel only)		
A. Floor Width	4'10"	(1.47m)
B. Interior Height	7'10"	(2.13m)
C. Interior Tunnel Ramp Width	4'8"	(1.42m)
D. Interior Cab Width	10'2"	(3.10m)
E. Cab Weather Door Width	3'9"	(1.14m)
F. Height	7'8"	(2.34m)

Service Door, Landing, and Stairs: A service door, landing, and stairs are situated at the cab end of the bridge to provide apron access. The right hand side of the cab bubble is standard. Other locations are available.

Self-Adjusting Stair Risers:

Minimum Tread Width	2'4"	(0.71m)
Minimum Tread Depth	9'5"	(0.24m)
Clear width between handrails	2'8"	(0.81m)
Door Width	2'6"	(0.76m)
Height	6'8"	(2.03m)

Operational Characteristics

Rotunda swing	175°	(87.5° cw/87.5° ccw of centerline)
Cab rotation	125°	(92.5° ccw/32.5° cw) (optional 185° available)
Cab rotation speed	145° /min.	
Vertical rate of travel/lift	3.6' /min.	(1.10m /min.) (At Lift Column Max.)
Horizontal rate of travel	0 to 60' /min.	

Environmental Characteristics:

Bridge operations at temperatures from -58°F (-50°C) to 125°F (52°C)

Interior Finish Characteristics

- Wall: Laminated phenolic plastic panels — 4' (1.22m) wide
- Ceiling: Aluminum Planks — .032" (0.81mm) thick
- Tunnel Floors: Carpeted and rubber flooring
- Cab Floor: Ribbed Rubber — 25" (6.35mm) thick
- Sub Floor: Marinegrade Plywood
- Insulation: 1/2" (12 mm) fi erglass above the ceiling (additional insulation available)

Exterior Finish Characteristics

- Painting: Meets corrosion protection requirements according to ISO 12944-6, Level C-3 Base: An epoxy primer
- Finish: Topcoat consisting of pigmented, high solids, catalyzed acrylic polyurethane

Electrical Characteristics

- Power Requirements:** Operates on 480 VAC, 3 phase, 60 Hz, 5 wire or 380 VAC 50Hz. 480 VAC is transformed to 120 VAC for lighting and control circuits. Export models can adapted to local power requirements.
- Interior Lighting:** 2'0" x 4'0" fluorescent tube fixtures on 12'0" centers (LED available)
- Exterior Lighting:** Three exterior floodlights illuminate the apron area and wheel bogey. Sealed fluorescent fixture illuminates the cab/aircraft interface area. LED lights are optional and one landing illumination fixture.

Communications: Equipped with CAT-6 and other cable for communications.

Codes and Standards

The Apron Drive Bridge meets or exceeds codes and regulations as adopted by the PBB industry. Jetway® Passenger Boarding Bridges are ETL listed and CSA approved.

Structural: American Institute of Steel Construction (AISC) and American Welding Society (AWS).

Materials:

Structural Plate	ASTM-A36
Structural Steel & Shapes	ASTM-A36 or ASTM A572
Hinge Pins	AISC-C1018
Steel Tube	ASTM-A500 Grade B
Bolts-Standard	ASTM-A307
Steel Pipe	ASTM-A53 Grade B
Bolts-High Strength	ASTM-A325
Steel Sheet	ASTM-A570
Bolts-High Strength	ASTM-A490
T-1 Steel	ASTM-A514

Code Compliance: SAE, ASME, NFPA, ASCE 7, NEMA, and NEC.



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