

Material

Carbon Steel 2mm-2.7mm thick

Finish

Double-Barrier Coating

Corrosion Resistance Level

Quik Guard® Coating: Hex-Head Washer

Corrosion Resistance Level

Size: See illustration on the right and tables below

Features & Benefits

- Flat T and L strap ties, Bolt-like connectors bring decorative appeal and lateral strength to your outdoor living area or even an indoor project
- Fastener and washer create decorative bolt-like connections but install with the ease of a screw and without predrilling
- Post bases secure timber posts to concrete, while providing a 25mm standoff height to help prevent rot from standing water and ground moisture
- All hardware has been structural strength tested and approved, and can be used to resist wind or seismic loads
- Black Double-Barrier Coating offers premium look while providing a medium level of corrosion protection for many outdoor applications
- Patent hex-head washer design facilitates easy installation

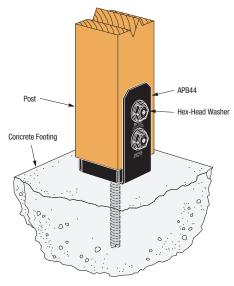
Installation

• Use all specified fasteners

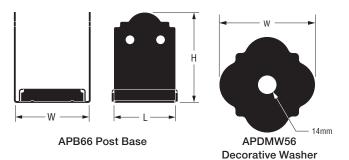
Approvals

- IAPMO-UES ER-192
- IAPMO-UES ER-280
- FL13975-R5
- FL10865-R4

Construction Details

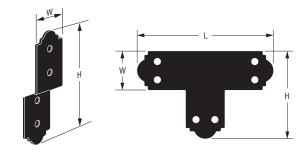


APB44 Post Base Installation



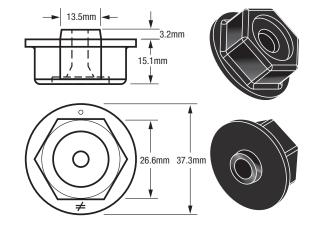
W H

APA4 Heavy Angle APL4 Strap Tie



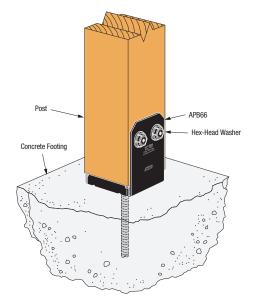
APDJT Deck Joist Tie

APT6 Strap Tie

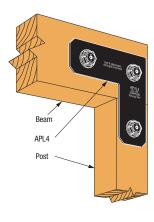


STN22 Hex-Head Washer

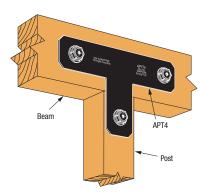


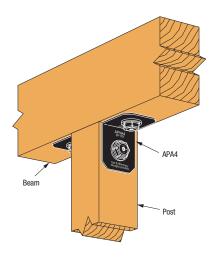


APB66 Post Base Installation

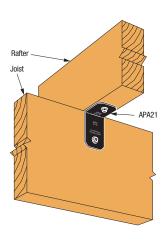


APL4 Post-to-Beam Corner Installation APT4 Post-to-Beam Corner Installation

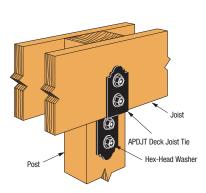




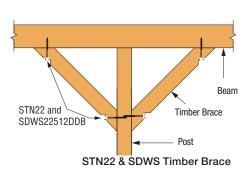
APA Post-to-Beam Corner Installation



APA21 Joist-to-Rafter Installation



APDJT Joist-to-Post Connection



APDMW56 Decorative Washer with STN22 Hex-Head Washer & SDWS Screw Bracing Timber

STN22 & SDWS Timber Brace Connection with Beam



Technical Data - Post Bases

	Dimensions (mm)			ı	asteners Qty		Design Capacity (kN)					
Model No.		w	Н	Column Anches Die (mm)		Α	ustralia	New Zealand		Box Qty		
		VV	п	Column	Anchor Dia. (mm)	Uplift (k ₁ =1.14)	Download (k ₁ =0.69)	Uplift (k ₁ =1.0)	Download (k ₁ =0.8)			
APB44	76	90	178	4	16	4.4	38.2	4.4	31.5	8		
APB66	127	140	191	4	16	5.0	62.9	2.5	51.8	6		

- 1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, or the NZ Strength Reduction Factor (b), and applicable the k modification factors following AS 1720.1 and NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
- 2. For Australia, the Capacity Factor (φ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor (φ) is 0.80 for nails and screws in lateral loading.
- 3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
- 4. Timber species for joint design is seasoned Radiata Pine, which is Australia
- Joint Group JD4 per AS 1720.1 Table $H_2.4$ and New Zealand timber grade SG8.
- Uplift loads have been increased for wind or earthquake or seismic with no further increase allowed; reduce where others govern.
- 6. Downloads may not be increased for short-term loading.
- 7. Specifier to design concrete for uplift capacity.
- 8. Downloads shall be reduced where limited by capacity of the post.
- All post fasteners are a Simpson Strong-Tie[®] SDWS22312DB inserted through an STN22 washer.
- Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not recommended for non-topsupported installations (such as fences or unbraced carports).

Technical Data - Deck Joist Tie

		Di	mensions	(mm)	Design Capacit	y (kN) - Download	
Model No.	Ga.	s	w	н	Australia	New Zealand	Box Qty
		3	. "		Floor (k ₁ =0.69)	Floor (k ₁ =0.8)	
APDJT1.75-4	10	45	76	246	14.4	13.5	24

- 1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, or the NZ Strength Reduction Factor (b), and applicable the k modification factors following AS 1720.1 and NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation
- 2. For Australia, the Capacity Factor (\$\phi\$) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor (\$\phi\$) is 0.80 for nails and screws in lateral loading.
- 3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor
- where applicable. Capacities may not be increased.
- Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H₂.4 and New Zealand timber grade SG8
- 5. Design capacity is for a single part.
- Joist fastener is a Simpson Strong-Tie SDWS22512DB inserted through an STN22 washer.
- 7. Post fastener is a Simpson Strong-Tie SDWS22312DB inserted through an STN22 washer.

Technical Data - Strap Ties

	Dimensions (mm)				ers Qty					
Model No.	w		Н	Column	Beam	Aust	Australia		ealand	Box Qty
	VV	_	П	Column	Dealli	Uplift (k ₁ =1.14)	F ₁ (k ₁ =1.14)	Uplift (k ₁ =1.0)	F ₁ (k ₁ =1.0)	
APL4	76	210	210	2	4	5.7	3.0	5.7	3.0	
APL6	127	286	286	4	6	8.6	6.0	8.6	6.0	8
APT4	76	343	210	2	4	5.9	4.5	5.9	4.5	0
APT6	127	445	286	4	8	12.9	6.3	10.8	6.3	

- 1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, or the NZ Strength Reduction Factor (b), and applicable the k modification factors following AS 1720.1 and NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation
- 2. For Australia, the Capacity Factor (ϕ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor (ϕ) is 0.80 for nails and screws in lateral loading.
- 3. Duration of Load Factor (k1) is as shown. Reduce Duration of Load Factor
- where applicable. Capacities may not be increased.
- 4. Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table $\rm H_2.4$ and New Zealand timber grade SG8.
- Allowable loads have been increased for wind or seismic loads with no further increase allowed.
- Connectors must be installed in pairs. Allowable loads do not apply to single parts.
- 7. All fasteners are a Simpson Strong-Tie® SDWS22312DB inserted through an STN22 washer.



Technical Data - Angles (2 required for APA4)

	Dimensions (mm)			Fasteners Qty						
Model No.			W-	Column	Beam	Australia		New Z	Box Qty	
	L	W ₁	W ₂	(Qty)	(Qty)	Uplift (k ₁ =1.14)	F ₁ (k ₁ =1.14)	Uplift (k ₁ =1.0)	F ₁ (k ₁ =1.0)	
APA4	76	83	76	2	2	2.0	6.2	2.0	6.2	12
APA21	35	51	38	1	1	0.9	1.1	0.9	1.1	90

- 2. For Australia, the Capacity Factor (\$\phi\$) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor (\$\phi\$) is 0.80 for nails and screws in lateral loading.
- 3. Duration of Load Factor (k1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
- Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4 and New Zealand timber grade SG8.
- Allowable loads have been increased for wind or seismic loads with no further increase allowed.
- 6. For APA4, connectors must be installed in pairs. Allowable loads do not apply to single parts.
- 7. For APA21 Allowable loads are for a single part.
- All fasteners for APA4 are a Simpson Strong-Tie[®] SDWS22312DB inserted through an STN22 washer.
- 9. All fasteners for APA21 are a Simpson Strong-Tie® SD#10x38.

Technical Data - Concealed Joist Hanger

	Joist Size (mm)		Dimensions (mm)		Fasteners Qty							
Model No.						Гоос	loiat	Australia		New Zealand		Box Qty
	Width	Height	WH		В	Face (Qty)	Joist (Qty)	Uplift (k ₁ =1.14)	Download (floor) (k ₁ =0.69)	Uplift (k ₁ =1.0)	Download (floor) (k ₁ =0.8)	
APLH45140	45	140-190	46	130	49	6	4	6.4	8.4	5.3	7.7	24
APLH45240	40	240-290	46	200	49	10	6	9.0	13.5	7.4	13.2	12

- 1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, and applicable the k modification factors following AS 1720.1 or the NZ Strength Reduction Factor (φ), and applicable the k modification factors following NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
- For Australia, the Capacity Factor (a) is 0.85 for screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength
- Reduction Factor (\$\phi\$) is 0.80 for nails in lateral loading.
- Duration of Load Factor (k1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
- Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4 and New Zealand Joint Group J5 per NZS 3603 Table 4.1.
- 5. Dimensions W, H and B are for the interior of the hanger.
- 6. All fasteners are a Simpson Strong-Tie® SD10112DBB #10x38.

Technical Data - Face Fix Joist Hanger

			_											
	Joist	Size (mm)	Dime	nsions	(mm)	Fasten	ers Qty			Design Cap	acity (kN)			
									Australia		New Zealand		d	_
Model No.	Width	Height	w	н	В	Face	Joist	Haliff	Dowi	nload	Haliff	Dowi	nload	Box Qty
		g				(Qty)	(Qty)	Uplift (k ₁ =1.14)	Floor (k1 = 0.69)	Roof (k1 = 0.77)	Uplift (k ₁ =1.0)	Floor (k1 = 0.80)	Roof (k1 = 0.80)	
SAE200/46/2PB	45	90-120	45	80	84	8	5	3.18	6.25	6.50	3.0	5.70	5.70	8
SAE250/46/2PB	45	115-150	45	100	84	12	7	5.57	7.27	7.27	5.24	6.84	6.84	12

- 1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, and applicable the k modification factors following AS 1720.1 or the NZ Strength Reduction Factor (\phi), and applicable the k modification factors following NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
- For Australia, the Capacity Factor (φ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the
- Strength Reduction Factor (\$\phi\$) is 0.80 for nails in lateral loading.
- 3. Duration of Load Factor (k1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
- Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4 and New Zealand Joint Group J5 per NZS 3603 Table 4.1.
- 5 Dimensions W H and B are for the interior of the hanger
- 6. All fasteners are a Simpson Strong-Tie® SD10112DBB #10x38.



Technical Data - Decorative Washer

Model No.	Thickness	Hole Dia.	W
APDMW56	2.7 mm	15 mm	76 mm

^{1.} Fastener is SDWS22312DBB or SDWS22512DBB, inserted through an STN22 washer.

Technical Data - Hex-Head Washer

Model No.	Diameter	Box Qty	Ctn Qty
STN22-R8	38 mm	8	10

Combined with the Outdoor Accents structural timber screws - SDWS22312DBB or SDWS22512DBB

Technical Data - Connector Screws

				Charac	teristic Withdi	rawal Value (N	N/mm)		
Model No. Size		Thread Length (mm)	Timber Side Member (mm)	Australia		New Zealand		Box Qty	
		()	()	JD4	JD5	SG8	SG6		
SD10112DBB	#10 x 38mm	25	38	101	71	139	97	5 Packs (50 per clamshell)	

- Characteristic values are for connections between two members with full thread penetration into the main member.
- 2. Characteristic values are based on installation into the side grain of the timber with the screw axis perpendicular to the face of the member.
- 3. The main and side members shall be sawn timber or structural composite
- timber with the specific gravity or equivalent specific gravity typical of JD4 and JD5 for Australia or SG8 and SG6 for New Zealand.
- 4. For design values, apply appropriate capacity factor.
- Design values shall be multiplied by applicable adjustment factors from AS 1720.1 or NZS 3603.

Technical Data - Structural Timber Screw and Hex-Head Washer

					Chai	acteristic	: Lateral	Value, Q _k	_L (N)	
Model No.	Hex-Head Washer	Screw Length (mm)	Thread Length (mm)	th Timber Side Member (mm)	Australia			New Z	ealand	Carton Qty
		()	()	(,	JD4	JD5	JD6	SG8	SG6	
SDWS22312DBBRC12		89	E4		0.475	0040	0000	3460	0145	10 Packs (12 per clamshell)
SDWS22312DBB-R50	STN22-R8	09	51	38	3475	2840	2660	3400	3145	6 Packs (50 per box)
SDWS22512DBBRC12		140	70		6930	6400	3910	9140	8580	10 Packs (12 per clamshell)

- 1. Characteristic values are for connections between two members with full thread penetration into the main member.
- Characteristic values are based on installation into the side grain of the timber with the screw axis perpendicular to the face of the member.
- 3. The main and side members shall be sawn timber or structural composite
- timber with the specific gravity or equivalent specific gravity typical of JD4, JD5 and JD6 for Australia or SG8 and SG6 for New Zealand.
- 4. For design values, apply appropriate capacity factor.
- Design values shall be multiplied by applicable adjustment factors from AS 1720.1 or NZS 3603.