Z-Saw cuts on the pull stroke.

FASTER - EASIER - MORE ACCURATE



Multiple of the second Okada Hardware Mfg. Co., Ltd. H H H H





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Fitting	Hook-Fit				Bla	des		
Group	50194 UTILITY H-300	Plastic board, pipe, Bamboo, S	Siding board					
			Blade Length	Tooth Spacing	Thickness	Kerf		
F	・ パイプソーHI 300 作品で開発		300 mm	1.50 mm	0.66 mm	1.02 mm		
			Surface Treatment Electroless Ni-P Pla		ess Ni–P Plated			
	50198 RIP H-300	Sawn wood, Rip cut						
			Blade Length Tooth Spacing		Thickness	Kerf		
	דיראי-או		300 mm		0.66 mm	0.93 mm		
	300 ktoener renn		Surface Treatr	ment Oil Coa	ted			
	50213 CROSS CONVEX H-300	Sawn wood, Cross cut						
			Blade Length Tooth Spacing		Thickness	Kerf		
	a 300 at the		300 mm	2.15 mm	0.70 mm	1.00 mm		
		ARAB DA ARABA DA BARARA BARARA BARARA BARARA	Surface Treatr	ment Oil Coa	ted			
G	50214							
	UNIVERSAL H-300	Sawn wood, Universal	Plada Lanath	Taath Saasian	Thiskness	Kauf		
			300 mm	2.15 mm	0.70 mm	1.75 mm		
	ゼットン-日 300年に加速		Surface Treatr	nent Oil Coa	ted			
	50236							
	FRAMING H-333	Sawn wood, Framing						
			Blade Length	Tooth Spacing	Thickness	Kerf		
	ゼットソーHI 坂井33335年日初初		333 mm	2.80 mm	0.90 mm	1.30 mm		
	******	************************	Surface Treatment Oil Coated					
	50230	Source Entering During						
		Sawn wood, Framing, Pruning	Blade Length Tooth Spacing Thickness			Kerf		
H	- (<u>*2/3</u>		273 mm	2.40 mm	0.90 mm	1.10 mm		
	UNUMBURAN ARABARA ARABA	алааналалаанааналалалала	Surface Treatr	ment Teflon (Coated			
	50001		L]		
	ouzzi ORICCO PRUNING H-210	Pruning						
I			Blade Length	Tooth Spacing	Thickness	Kerf		
		RARKRARRI	210 mm	2.30 mm	0.80 mm	1.10 mm		
	and a second		Surface Treat	ment Teflon (Coated			
	50222							
	ORICCO PRUNING H-240	Pruning						
J			Blade Length	Tooth Spacing	Thickness	Kerf		
		KANANARAMAKKAKAL	240 mm	2.40 mm	0.80 mm	1.10 mm		
			Surface Treatment Teflon Coated					
1								





Fitting	Screw-Fit				Bla	des			
Group	F0107								
	COMPASS S-80	Sawn wood, Universal, Gypsur	n board						
			Blade Length	Tooth Spacing	Thickness	Kerf			
			80 mm	1.60 mm	0.90 mm	1.30 mm			
			Surface Treatr	nent Electro	ess Ni-P Plated				
	50108		Recommend	ed handle : PI	STOL S-117				
	DRYWALL S-90	Sawn wood, Universal, Gypsur	n <u>board</u>						
			Blade Length	Tooth Spacing	Thickness	Kerf			
	**************************************		90 mm	1.60 mm	0.90 mm	1.36 mm			
			Surface Treatm	nent Electro	ess Ni-P Plated				
	Recommended handle : PISTOL S-117 50109								
	COMPASS S-150	COMPASS S-150 Sawn wood, Universal, Gypsum board							
N	3.		Blade Length	Tooth Spacing	Thickness	Kerf			
			150 mm	1.60 mm	0.90 mm	1.30 mm			
			Surface Treatm	ed bandle · PI	STOL S-117				
	50110		Recommend		0102 0 117				
	COMPASS S-210	Sawn wood, Universal, Gypsur	n board	-					
	• 1750-210		210 mm	1 60 mm	1 hickness	1 30 mm			
		***************************************	Surface Treate	nent Electro	ess Ni-P Plated	1.00 mm			
			Recommend	ed handle : PI	STOL S-117				
	50210								
	BAMBOO S-270	Bamboo	Blade Length	Tooth Spacing	Thickness	Kerf			
	せつ竹焼品を開		270 mm	2.00 mm	0.80 mm	1.05 mm			
	********	*****	Surface Treatm	nent Electro	less Ni-P Plated				
			Recommend	ed handle : PI	STOL S-155				
	50031 PRUNING PS-170	Pruning							
			Blade Length	Tooth Spacing	Kerf				
	SL果借 III ITO程序格at SOM		170 mm	2.15 mm	0.50 mm	0.64 mm			
			Surface Treatm	nent Electro	ess Ni-P Plated				
	50061								
	PRUNING FINE PS-200	Pruning							
	SL果樹加 Malagibi refer		Blade Length	Tooth Spacing	Thickness	Kerf			
		manananan	200 mm	2.40 mm	0.60 mm	0.76 mm			
			Surface Treatm	nent Electro	ess Ni-P Plated				
	50084								
0	PRUNING MEDIUM PS-200	Pruning							
	SL果樹田 200中目45.60%		Blade Length	Tooth Spacing	Thickness	Kerf			
		CARAMANAN	200 mm	3.30 mm	0.70 mm	0.90 mm			
			Surrace Treath	Electrole	SS INITY Plated				
	50100								
	PRUNING COARSE PS-230	Pruning							
	SL果樹 /// 230荒目時で照		Blade Length	I ooth Spacing	1 hickness	Kerf			
				T.UU IIIII	0.00 11111				
			Surface Treatm	nent Electro	less Ni-P Plated				







Z-Light



 $W \times H \times D$: 29 × 49.5 × 34 mm Net weight : 20 g battery : CR2302(3V) × 2

ED : Attachable handle





The Z-Light unit can be attached to the handles of B and D - G fitting groups. With the Z-Light switched on, your scribe mark can be clearly seen even in dark and confined spaces. Powered by an easily-replaced Button cell, the light can stay bright for more than 10 hours continuous use.







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Blades

50400

Biade Length Tooth Spacing Thickness Kerf 50401 WALLBOARD 90 Sawn wood, Gypsum board Surface Treatment Electroless Ni-P Plated 50402 PVC/PE PIPE 210 Plastic board, pipe, Bamboo Blade Length Tooth Spacing Thickness Kerf 50403 PRUNING 210 Green wood Blade Length Tooth Spacing Thickness Kerf 50404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 50404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 50404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm J.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated	WOODWORKING 210	Sawn wood, Green wood					
210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated Surface Treatment Electroless Ni-P Plated Sufface Iregits Thickness Sufface Iregi	CAMPETT		Blade Length	Toot	h Spacing	Thickness	Kerf
Surface Treatment Electroless Ni-P Plated Sourface Treatment Electroless Ni-P Plated		winnel	210 mm	:	3.00 mm	0.90 mm	1.18 mm
50401 WALLBOARD 90 Sawn wood, Gypsum board Source Blade Length Tooth Spacing Thickness Kerf 90 mm 1.60 mm 0.90 mm 1.36 Source PVC/PE PIPE 210 Plastic board, pipe, Bamboo Blade Length Tooth Spacing Thickness Kerf 50403 PRUNING 210 Green wood Blade Length Tooth Spacing Thickness Kerf 50404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated			Surface Treatr	ce Treatment Electrol		oless Ni-P Plated	
WALLBOARD 90 Sawn wood, Gypsum board Blade Length Tooth Spacing Thickness Kerf 90 mm 1.60 mm 0.90 mm 1.36 Surface Treatment Electroless Ni-P Plated S0402 PVC/PE PIPE 210 Plastic board, pipe, Bamboo Surface Treatment Electroless Ni-P Plated S0403 PRUNING 210 Green wood S0404 Blade Length Tooth Spacing Thickness S0404 Blade Length Tooth Spacing Thickness S0404 Blade Length Tooth Spacing Thickness S0404 Bamboo Blade Length Tooth Spacing Thickness S0404 Bamboo Blade Length Tooth Spacing Thickness Surface Treatment Electroless Ni-P Plated Surface Treatment Electroless Ni-P Plated	50401						
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50402 PVC/PE PIPE 210 Plastic board, pipe, Bamboo 50403 PRUNING 210 Green wood 50404 Blade Length Tooth Spacing Thickness Kerf 210 mm 1.50 mm 0.60 mm 0.93 50403 Surface Treatment Electroless Ni-P Plated 50404 Surface Treatment Electroless Ni-P Plated 50404 Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 50404 Bamboo 50404 Bamboo 50404 Bamboo 50404 Bamboo			90 mm	1.60 mm		0.90 mm	1.36 mm
50402 PVC/PE PIPE 210 Plastic board, pipe, Bamboo Image: Contract of the system of the sy			Surface Treatr	tment Electroless Ni-P PI		ess Ni-P Plated	
PVC/PE PIPE 210 Plastic board, pipe, Bamboo Image: Source of the second of t	50402						
Blade Length Tooth Spacing Thickness Kerf 210 mm 1.50 mm 0.60 mm 0.93 Surface Treatment Electroless Ni-P Plated Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated Surface Treatment Electroless Ni-P Plated S0404 BAMBOO 210 Bamboo Surface Treatment Electroless Ni-P Plated Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated Surface Treatment Electroless Ni-P Plated Surface Treatment Electroless Ni-P Plated	PVC/PE PIPE 210	Plastic board, pipe, Bamboo					
210 mm 1.50 mm 0.60 mm 0.93 50403 PRUNING 210 Green wood Surface Treatment Electroless Ni-P Plated 50404 Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated 50404 Bamboo Surface Treatment Electroless Ni-P Plated 50404 Bamboo Surface Treatment Electroless Ni-P Plated	Victor FT-FTF		Blade Length	Toot	h Spacing	Thickness	Kerf
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50403 PRUNING 210 Green wood Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 S0404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm 2.15 mm 0.80 mm 1.10			Surface Treatr	nent	ent Electroless Ni-P Plated		
Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 S0404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated Blade Length Tooth Spacing Thickness Kerf 210 mm 0.80 mm 1.10	50403						
Blade Length Tooth Spacing Thickness Kerf 210 mm 3.00 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated Blade Length Tooth Spacing Thickness Kerf 210 mm 0.90 mm 1.18 Surface Treatment Electroless Ni-P Plated 100 Blade Length Tooth Spacing Thickness Kerf 210 mm 2.15 mm 0.80 mm 1.10	PRUNING 210	Green wood					
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Surface Treatment Electroless Ni-P Plated 50404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm 2.15 mm 0.80 mm 1.10		MA	210 mm	:	3.00 mm	0.90 mm	1.18 mm
50404 BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm 2.15 mm 0.80 mm 1.10			Surface Treatr	nent	Electrol	ess Ni–P Plated	
BAMBOO 210 Bamboo Blade Length Tooth Spacing Thickness Kerf 210 mm 2.15 mm 0.80 mm 1.10	50404						
Blade Length Tooth Spacing Thickness Kerf 210 mm 2.15 mm 0.80 mm 1.10	BAMBOO 210	Bamboo					
210 mm 2.15 mm 0.80 mm 1.10	林大和 (1月1)用		Blade Length	Toot	h Spacing	Thickness	Kerf
			210 mm	:	2.15 mm	0.80 mm	1.10 mm
Surface Treatment Electroless Ni-P Plated			Surface Treatment Electroless Ni-P Plated				



WOODWORKING 210





WALLBOARD 90



PRUNING 210



PVC/PE PIPE 210



BAMBOO 210

Tips on pulling saw

1. Place the teeth perpendicularly on the work piece

The right and left line of the saw teeth tips should bite the lumber simultaneously as in the center picture left. The traverse force to the saw blade generated between right and left teeth balances when they bite into equal material. If there is an imbalanced condition, the saw blade is drawn toward the loaded teeth.

For beginners, using the Saw Guide is recommended.

2. Pull to cut

On push stroke, the saw teeth shove saw dust away and clean the sawing groove. The pressure to the saw blade should be minimized to not more than blade weight on push stroke.



Right and left teeth should bite lumber simultaneously.



3. Straight sawing motion

Stroke the saw in a rhythm of 2-beats without stopping at every stroke end. Continual strokes are produced by a steady arm swing repeated close to your body. The sawing stroke plane should be always kept within the plane extended from the saw blade. Excessive pressure on the saw blade may lose the straightness in sawing direction. The saw's straight cutting capability is affected by the density difference in wood, by knots and growth rings, etc.

When you encounter an uneven work piece, do not give too much pressure to the saw blade and take time for sawing. It should result in a straight and smooth finish. If you get a clean and straight cut, you save much time to readjust with file or chisels later. The **Saw Guide** is effective to maintain stable strokes.

4. Solid grip

If you hold the work piece with a vice or clamp, sawing gets easier and both hands are available for more stable stroking. In case you must hold the work piece with your hand, 70% of your force should be apportioned for holding and only 30% for sawing.

5. Sawing with saw weight

Cutting lumber in a slant line, or vertically inclined, the saw blade receives thrusts from cutting. Start with slight pressure toward cutting direction to leave enough time for the saw teeth to absorb the thrust.

6. At the end of sawing

At the end of sawing the cut off piece should be duly supported to avoid splitting work piece. Also, sawing pressure should be minimized.

Z-Saw and Our Company

1. Okada Hardware is a leading Japanese handsaw manufacturing company, established in 1943.

For more than half a century, we have put ourselves in the customers' shoes and dedicated ourselves to manufacturing high quality handsaws to meet the changing demands of the competitive market. The saw manufacturing system developed in-house and our commitment to seeing the customers' viewpoint have resulted in the **Z-Saw** brand name showing a steady increase in popularity leading to an annual output of no less than 5 million units. Consequently we have come to enjoy a high reputation worldwide. Despite all these achievements we continue to strive to be more sensitive to the changing demands of global markets, and to try our best to provide ever-higher quality products for our customers.

2. High quality materials

The blades of all **Z-Saws** are made from high quality carbon steel strips which we source from prestigious manufacturers in the international market under strict quality control. The steel strips are as hard as HV 540 to 580 with 0.8 - 0.9 % of carbon content, widely considered to be the best material for high quality saw blades featuring superb flexibility and durability.

3. Perfectly ground teeth

The teeth of **Z-Saw** blades are ground using our self-developed automatic tooth grinding system. Even the smallest distortion will be automatically detected and carefully corrected. This is almost impossible to achieve with hand-filed teeth.



Rip cut Slant Edge

Top view

Side view

4. Custom tooth patterns

Z-Saw makes saw blades with several different basic tooth patterns (e.g. rip/cross/universal) each of which is applied to different saw blades with subtle variations depending on the use of each individual saw.

Cross cut Thorn Edge

Cross cut Tri=Edge Typical Saw Edges

Rip cut Orthodox Edge

5. Impulse hardened teeth

All the teeth of **Z-Saw** branded blades are hardened through the "**Hard Impulse**" treatment to increase the degree of hardness to the level of HV800-950 (64.0 - 68.2 HRC), which is the maximum hardness which can be achieved on steel. Implementing this treatment on the tips of the saw teeth means that they are able to stay sharp much longer than conventional counterparts.



6. Economy

Z-Saws are economical because all blades are interchangeable, and available at a much lower price than the cost of tooth re-sharpening. Furthermore, the quality of the interchangeable blades is much higher than conventional hand forged saws.

7. Z-Saw blades are Interchangeable among the three types of fitting group

Hook-Fit handles are designed for simple blade attachment and have various lengths of blade holder, according to blade style and size, to maintain stiffness and straightness during use.

Screw-Fit handles are designed for comfortable and balanced grip with a simple and safe blade locking system.

Pin-Fit handles are designed for safe storage and easy portability with our innovative angle adjustability.

