

22.5° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(22.5) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((22.5)) \div \tan(45)) \tan(45) = 11.6 \text{ mm}$$

45° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(45) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((45)) \div \tan(45)) \tan(45) = 43.3 \text{ mm}$$

67.5° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(67.5) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((67.5)) \div \tan(45)) \tan(45) = 85.8 \text{ mm}$$

90° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(90) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((90)) \div \tan(45)) \tan(45) = 127.6 \text{ mm}$$

112.5° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(112.5) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((112.5)) \div \tan(45)) \tan(45) = 160.0 \text{ mm}$$

135° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(135) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((135)) \div \tan(45)) \tan(45) = 180.5 \text{ mm}$$

157.5° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(157.5) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((157.5)) \div \tan(45)) \tan(45) = 190.9 \text{ mm}$$

180° center line cut back calculations

$$(229 - \sqrt{229^2 - (\sin(180) \times 97)^2}) \div \sin(45) + 97 (1 - \cos((180)) \div \tan(45)) \tan(45) = 194.0 \text{ mm}$$