

Shrinkage coefficients

Species	Radial shrinkage (%)	Tangential shrinkage (%)
Birch, paper	6.5	8.6
Birch, sweet	6.5	8.5
Birch, yellow	7.2	9.2
Cedar	4.7	10.2
Douglas-fir, coastal	5.0	7.8
Douglas-fir, interior-north	3.8	6.9
Douglas-fir, interior-west	4.8	7.5
Maple, black	4.8	9.2
Maple, red	4.0	8.2
Maple, sugar	4.9	9.5
Oak, black	4.5	9.7
Oak, Oregon white	4.2	9.0
Oak, Northern red	4.0	8.2
Oak, Southern red	4.5	8.7
Oak, white	5.3	9.0
Poplar, yellow	4.6	8.2
Walnut, black	5.5	7.8
Mahogany	3.6	5.0



Article:

The Shrinkage and Swelling of Wood and its effects on Furniture

By Carl A. Eckelman

Published by:

Purdue University – Forestry and Natural Resources

Cooperative Extension Service

West Lafayette, Indiana, USA

Mahogany shows the lowest value both for tangential and radial contraction. It is therefore the most stable material among those used in organbuilding today.

Mahogany variety utilized by Fratelli Ruffatti:

Sipo Mahogany (*Entandrophragma utile*)

Family: *meliacee*

Distribution: West and central Africa

Growing environment: Moist deciduous forest, grows to height of 150 to 200 feet

Shape: Straight, cylindrical. Diameter at base may reach 8 feet

Naturally resistant to termite damage

Sipo is the most stable among all varieties of Africam Mahogany. Since the values shown in the above table likely refer to average quality mahogany, these values may be even better for Sipo. All Sipo mahogany used in the Ruffatti workshop is *Forest Stewardship Council* (FSC) certified, coming from forests where sustainable forestry is practiced.