Forisk Standard Conversion Values and Product Specifications

Figure 1. Product Specifications

Pine Pulpwood:	6-8" DBH classes
Pine Chip-n-Saw:	10" DBH class (assume 65% of volume is pulpwood)
Pine Sawtimber:	12" DBH class (25% cull)
	18-21" DBH classes (15% cull)
Hardwood Pulpwood:	6-12" DBH classes
Hardwood Sawtimber:	14-21" DBH classes (assume 25% is culled to pulpwood)

Figure 2. Volume to Volume and Volume to Weight Conversions

Ft^3 per MBF	83.0	Standard conversion (lumber)
Ft^3 per m^3	35.3	
MBF per m^3	0.425	
m^3 per MBF	2.35	
MSF panels (3/4 inch) per m^3	0.57	source: Random Lengths
MSF panels (3/8 inch) per m^3	1.13	source: Random Lengths
Tons per scaled MBF (PNW)	7.50	Scribner Decimal C
Tons per m^3 – pine (South)	1.23	Source: USFS
Tons per m^3 – hardwood (South)	1.35	Source: USFS

Figure 3. Product Recovery Factors
(Tons of raw material needed per unit of product output)

Mill Type	Factor	Units (Tons per...)
Hardwood lumber	7.17	MBF (nominal)
	3.05	m^3 (nominal)
OSB/panel	1.83	MSF-3/8"
	1.77	m^3 (actual)
Plywood/veneer*	1.80	MSF-3/8"
	2.03	m^3 (actual)
Kraft pulp	3.56	ton
Newsprint	3.20	ton
Tissue	4.09	ton
Fluff pulp	5.40	ton
Chip mill	1.05	ton
Wood Pellets	2.20	ton
Electricity	12,000	megawatt
Ethanol	0.025	gallon

*These factors are specific to the South; see Figure A5.4 for PNW product recovery factors.

Figure 4. Pacific Northwest Product Recovery Factors
(Scaled MBF of raw material needed per unit of product output)

Mill Type	Factor	Units (MBF per...)
Softwood lumber (stud mills)	0.385	MBF (nominal)
	0.163	m^3 (nominal)
Softwood lumber (dimensional)	0.435	MBF (nominal)
	0.185	m^3 (nominal)
Plywood/veneer	0.200	MSF-3/8"
	0.226	m^3 (actual)

Figure 5. U.S. South Softwood Lumber Recovery Factors
(Tons of raw material per unit of product output)

Sawmill Size	Factor	Units (MBF per...)
50-100 MMBF	4.37	MBF (nominal)
	1.86	m^3 (nominal)
101-200 MMBF	4.27	MBF (nominal)
	1.81	m^3 (nominal)
>200 MMBF	4.07	MBF (nominal)
	1.73	m^3 (actual)