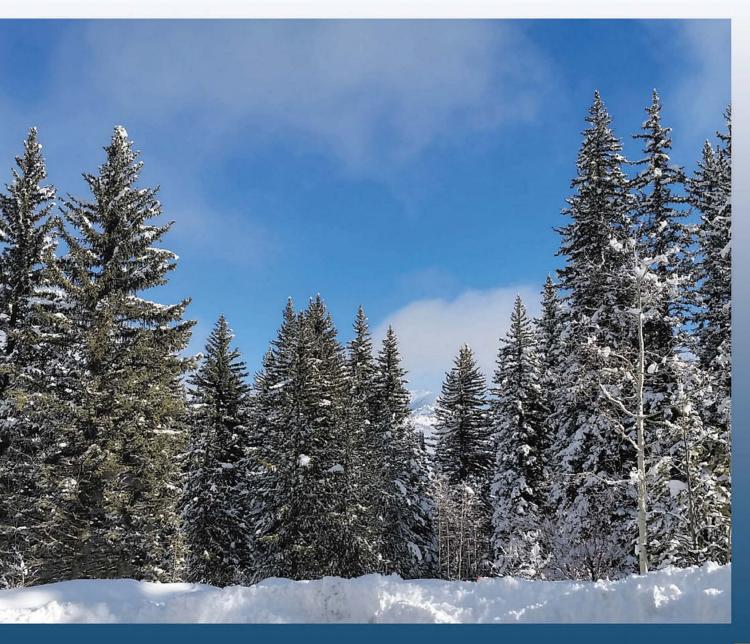
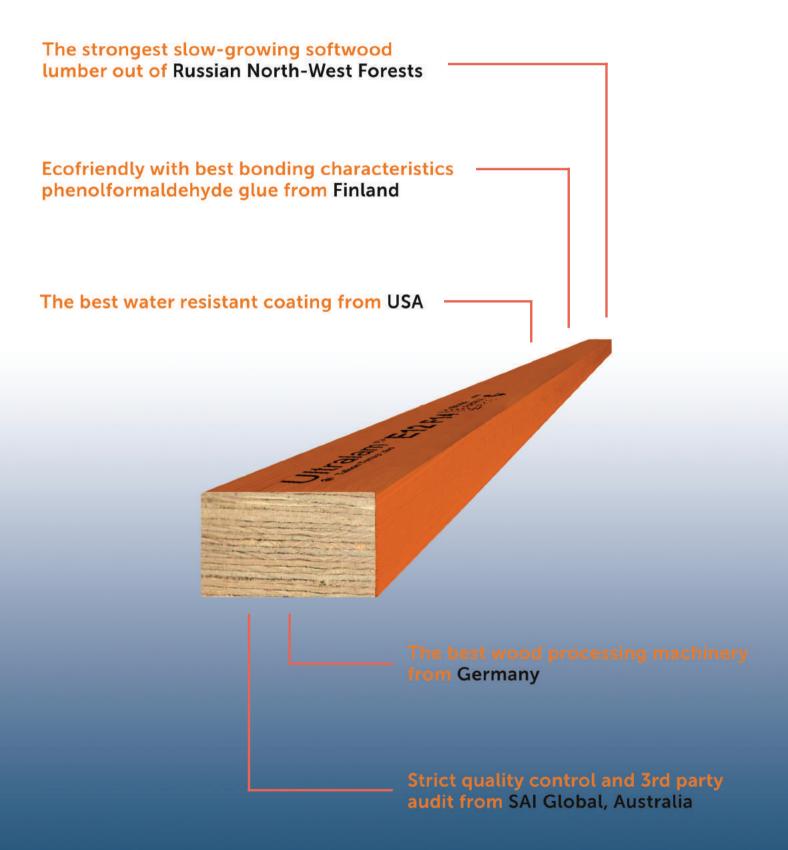




Modern Lumber Technology Ltd. is one of the biggest Forest owners in the Tver region of North West of Russia with annual logging of 1500 000 m.<sup>3</sup>

Ultralam LVL formwork beams are produced from the strongest slow-growing softwood lumber of North-West of Russia with Finnish E0 phenolic glue and high-tech American water resistant orange coating is certified and 3rd party audited by Australian SAI Global according to AS/NZS 4357.





### **SUITABLE APPLICATIONS:**

Formwork bearers and Joists Soldiers and Walers







#### SPECIFICATION:

#### Veneer:

Species – Norway Spruce and Scotch pine Thickness – 3.2mm

#### Joints:

face and core scarfed veneers

#### Glue:

Phenolformaldehyde

#### Bond:

Type A (Marine) AS/NZS 2098 and AS/2754

## **Density:** 560 kg/m<sup>3</sup>

Additional processing: arrised edges and orange water resistant coating

#### **ULTRALAM LVL FORMWORK BEAMS PRODUCTS**

CROSS SECTION DXB (MM)	MASS KG/M	PIECES PER PACK
45X95	2,4	11X7 (77)
63X95	3,35	11X5 (55)
75X130	5,46	9X2 (18)
75X150	6,3	8X2 (16)



**Density/Tolerances** 560 kg/m<sup>3</sup>

Thinckness -0/+4 mm

Length -0/+10 mm

Width 0/+2 mm

The tabular data and standard design in present publication have been prepared in accordance with AS 3610-1995 dd. January 2003, rev.1 and AS 1720.1-2010 Australian Standard for Timber Structures Part 1: Design Methods, dd. August 2015, rev.3



### **ULTRALAM E12 CONCRETE FORMWORK JOIST SPAN TABLES**

Table 1 below is for Ultralam E12 joists supporting concrete formwork with a deflection criteria of Class III (span/270)

Concrete	Ultralam		Ultralan	n E12 Joi:	st Spacir	ng (mm)		Ultralam E12 Joist Spacing (mm)						
slab	E12 Member	225	300	400	450	480	600	225	300	400	450	480	600	
thickness (mm)	size (mm)	Ultr	alam E1	2 Maxim	um Sing	le Span	Ultralam E12 Maximum Continuous Span (m)							
	95 x 45	1.95	1.75	1.60	1.50	1.50	1.40	2.40	2.15	1.95	1.90	1.80	1.65	
	95 x 47	1.95	1.80	1.60	1.55	1.50	1.40	2.45	2.20	2.00	1.90	1.85	1.65	
	95 x 63	2.15	1.95	1.80	1.70	1.65	1.55	2.70	2.45	2.20	2.10	2.10	1.90	
100	95 x 65	2.20	2.00	1.80	1.75	1.70	1.55	2.70	2.45	2.25	2.15	2.10	1.95	
100	130 x 75	3.15	2.85	2.60	2.50	2.45	2.25	3.90	3.55	3.20	3.10	3.05	2.80	
	130 x 77	3.20	2.90	2.60	2.50	2.45	2.30	3.95	3.60	3.25	3.10	3.05	2.85	
	150 x 75	3.65	3.30	3.00	2.90	2.80	2.60	4.50	4.10	3.70	3.60	3.50	3.25	
	150 x 77	3.70	3.35	3.05	2.90	2.85	2.65	4.55	4.15	3.75	3.60	3.55	3.30	
	95 x 45	1.80	1.65	1.50	1.45	1.40	1.30	2.25	2.05	1.85	1.75	1.70	1.50	
	95 x 47	1.85	1.70	1.50	1.45	1.45	1.30	2.30	2.10	1.90	1.80	1.75	1.55	
	95 x 63	2.05	1.85	1.70	1.60	1.60	1.45	2.55	2.30	2.10	2.00	1.95	1.80	
150	95 x 65	2.05	1.85	1.70	1.65	1.60	1.50	2.55	2.35	2.10	2.05	2.00	1.85	
	130 x 75	3.00	2.70	2.45	2.35	2.30	2.15	3.70	3.35	3.05	2.95	2.85	2.65	
	130 x 77	3.00	2.75	2.50	2.40	2.35	2.15	3.75	3.40	3.05	2.95	2.90	2.70	
	150 x 75	3.45	3.15	2.85	2.75	2.65	2.50	4.25	3.90	3.50	3.40	3.30	3.05	
	150 x 77	3.50	3.15	2.85	2.75	2.70	2.50	4.30	3.90	3.55	3.40	3.35	3.10	
	95 x 45	1.75	1.55	1.45	1.35	1.35	1.25	2.15	1.95	1.75	1.65	1.60	1.45	
	95 x 47	1.75	1.60	1.45	1.40	1.35	1.25	2.20	2.00	1.80	1.70	1.65	1.45	
	95 x 63	1.95	1.75	1.60	1.55	1.50	1.40	2.40	2.20	2.00	1.90	1.85	1.70	
200	95 x 65	1.95	1.80	1.60	1.55	1.50	1.40	2.45	2.20	2.00	1.95	1.90	1.75	
200	130 x 75	2.85	2.60	2.35	2.25	2.20	2.05	3.50	3.20	2.90	2.80	2.75	2.55	
	130 x 77	2.85	2.60	2.35	2.25	2.20	2.05	3.55	3.25	2.95	2.80	2.75	2.55	
	150 x 75	3.30	3.00	2.70	2.60	2.55	2.35	4.05	3.70	3.35	3.20	3.15	2.90	
	150 x 77	3.30	3.00	2.75	2.60	2.55	2.40	4.10	3.75	3.40	3.25	3.20	2.95	
	95 x 45	1.60	1.45	1.30	1.25	1.25	1.15	2.00	1.80	1.60	1.50	1.45	1.30	
	95 x 47	1.65	1.45	1.35	1.30	1.25	1.15	2.00	1.85	1.65	1.55	1.50	1.35	
	95 x 63	1.80	1.65	1.50	1.40	1.40	1.30	2.25	2.00	1.85	1.75	1.70	1.55	
200	95 x 65	1.80	1.65	1.50	1.45	1.40	1.30	2.25	2.05	1.85	1.80	1.75	1.55	
300	130 x 75	2.60	2.40	2.15	2.05	2.05	1.90	3.25	2.95	2.70	2.55	2.50	2.30	
	130 x 77	2.65	2.40	2.20	2.10	2.05	1.90	3.30	3.00	2.70	2.60	2.55	2.35	
	150 x 75	3.05	2.75	2.50	2.40	2.35	2.20	3.75	3.40	3.10	3.00	2.90	2.65	
	150 x 77	3.05	2.80	2.50	2.40	2.35	2.20	3.80	3.45	3.15	3.00	2.95	2.70	

	95 x 45	1.50	1.35	1.25	1.20	1.15	1.05	1.85	1.70	1.45	1.40	1.35	1.20
	95 x 47	1.50	1.40	1.25	1.20	1.15	1.10	1.90	1.70	1.50	1.40	1.35	1.20
	95 x 63	1.70	1.55	1.40	1.35	1.30	1.20	2.10	1.90	1.70	1.65	1.60	1.40
400	95 x 65	1.70	1.55	1.40	1.35	1.30	1.20	2.10	1.90	1.75	1.65	1.60	1.45
400	130 x 75	2.45	2.25	2.00	1.95	1.90	1.75	3.05	2.75	2.50	2.40	2.35	2.10
	130 x 77	2.50	2.25	2.05	1.95	1.90	1.80	3.10	2.80	2.55	2.45	2.40	2.15
	150 x 75	2.85	2.60	2.35	2.25	2.20	2.05	3.55	3.20	2.90	2.80	2.75	2.45
	150 x 77	2.85	2.60	2.35	2.25	2.20	2.05	3.55	3.25	2.95	2.80	2.75	2.50
	95 x 45	1.40	1.30	1.15	1.10	1.10	1.00	1.75	1.60	1.35	1.30	1.25	1.10
	95 x 47	1.45	1.30	1.20	1.15	1.10	1.05	1.80	1.60	1.40	1.30	1.25	1.15
	95 x 63	1.60	1.45	1.30	1.25	1.25	1.15	2.00	1.80	1.60	1.50	1.45	1.30
500	95 x 65	1.60	1.45	1.30	1.25	1.25	1.15	2.00	1.80	1.65	1.55	1.50	1.35
500	130 x 75	2.35	2.10	1.90	1.85	1.80	1.65	2.90	2.60	2.40	2.30	2.20	2.00
	130 x 77	2.35	2.15	1.95	1.85	1.80	1.70	2.90	2.65	2.40	2.30	2.25	2.00
	150 x 75	2.70	2.45	2.20	2.15	2.10	1.95	3.35	3.05	2.75	2.65	2.55	2.30
	150 x 77	2.70	2.45	2.25	2.15	2.10	1.95	3.35	3.05	2.80	2.65	2.60	2.30
	95 x 45	1.35	1.25	1.10	1.05	1.05	0.95	1.70	1.50	1.30	1.20	1.15	1.05
	95 x 47	1.35	1.25	1.15	1.10	1.05	1.00	1.70	1.50	1.30	1.25	1.20	1.05
	95 x 63	1.50	1.40	1.25	1.20	1.15	1.10	1.90	1.70	1.50	1.45	1.40	1.25
600	95 x 65	1.55	1.40	1.25	1.20	1.20	1.10	1.90	1.75	1.55	1.45	1.40	1.25
600	130 x 75	2.20	2.00	1.85	1.75	1.70	1.60	2.75	2.50	2.25	2.15	2.10	1.85
	130 x 77	2.25	2.05	1.85	1.75	1.75	1.60	2.80	2.50	2.30	2.20	2.10	1.90
	150 x 75	2.55	2.35	2.10	2.05	2.00	1.85	3.20	2.90	2.65	2.50	2.40	2.15
	150 x 77	2.60	2.35	2.15	2.05	2.00	1.85	3.20	2.90	2.65	2.50	2.45	2.15
	95 x 45	1.15	1.05	0.95	0.90	0.90	0.85	1.40	1.20	1.05	1.00	0.95	0.85
	95 x 47	1.20	1.10	1.00	0.95	0.90	0.85	1.45	1.25	1.10	1.00	1.00	0.85
	95 x 63	1.30	1.20	1.10	1.05	1.00	0.95	1.65	1.45	1.25	1.20	1.15	1.00
1000	95 x 65	1.35	1.20	1.10	1.05	1.05	0.95	1.65	1.45	1.25	1.20	1.15	1.05
1000	130 x 75	1.95	1.75	1.60	1.50	1.50	1.40	2.40	2.15	1.90	1.75	1.70	1.55
	130 x 77	1.95	1.75	1.60	1.55	1.50	1.40	2.40	2.20	1.90	1.80	1.75	1.55
	100 1177												
	150 x 75	2.25	2.05	1.85	1.75	1.75	1.60	2.75	2.50	2.15	2.05	2.00	1.75

### **ULTRALAM E12 CONCRETE FORMWORK BEARER SPAN TABLES**

Table 2 below is for Ultralam E12 bearers supporting concrete formwork with a deflection criteria of Class III (span/270)

Concrete slab thickness	Ultralam	Ultralam E12 Bearer Spacing (mm)							Ultralam E12 Bearer Spacing (mm)					
	E12 Member	900	1200	1500	1800	2100	2400	900	1200	1500	1800	2100	2400	
(mm)	size (mm)	Ultr	alam E1	2 Maxim	um Sing	le Span	Ultralam E12 Maximum Continuous Span (m)							
	95 x 45	1.20	1.10	1.00	0.95	0.85	0.80	1.30	1.15	1.00	0.95	0.85	0.75	
	95 x 47	1.20	1.10	1.00	0.95	0.90	0.80	1.35	1.15	1.05	0.95	0.85	0.80	
	95 x 63	1.35	1.20	1.15	1.05	1.00	0.95	1.55	1.35	1.20	1.10	1.00	0.95	
100	95 x 65	1.35	1.25	1.15	1.05	1.00	0.95	1.60	1.40	1.25	1.10	1.05	0.95	
100	130 x 75	1.95	1.80	1.65	1.55	1.50	1.40	2.35	2.05	1.80	1.65	1.55	1.45	
	130 x 77	2.00	1.80	1.65	1.55	1.50	1.40	2.40	2.05	1.85	1.70	1.55	1.45	
	150 x 75	2.30	2.05	1.90	1.80	1.70	1.65	2.70	2.35	2.10	1.90	1.75	1.65	
	150 x 77	2.30	2.10	1.95	1.80	1.75	1.65	2.75	2.40	2.15	1.95	1.80	1.70	
	95 x 45	1.15	1.05	0.95	0.85	0.80	0.75	1.25	1.05	0.95	0.85	0.75	0.70	
	95 x 47	1.15	1.05	0.95	0.90	0.80	0.75	1.25	1.10	0.95	0.90	0.80	0.70	
	95 x 63	1.25	1.15	1.05	1.00	0.95	0.90	1.45	1.25	1.15	1.05	0.95	0.90	
150	95 x 65	1.30	1.15	1.10	1.00	0.95	0.90	1.50	1.30	1.15	1.05	0.95	0.90	
	130 x 75	1.85	1.70	1.55	1.45	1.40	1.35	2.20	1.90	1.70	1.55	1.45	1.35	
	130 x 77	1.90	1.70	1.60	1.50	1.40	1.35	2.25	1.95	1.75	1.55	1.45	1.35	
	150 x 75	2.15	1.95	1.80	1.70	1.60	1.55	2.55	2.20	1.95	1.80	1.65	1.55	
_	150 x 77	2.20	1.95	1.85	1.70	1.65	1.55	2.60	2.25	2.00	1.80	1.70	1.55	
	95 x 45	1.10	1.00	0.90	0.80	0.75	0.70	1.15	1.00	0.90	0.80	0.70	0.65	
	95 x 47	1.10	1.00	0.90	0.85	0.75	0.70	1.20	1.05	0.90	0.80	0.75	0.65	
	95 x 63	1.20	1.10	1.00	0.95	0.90	0.85	1.40	1.20	1.05	0.95	0.90	0.80	
000	95 x 65	1.20	1.10	1.05	0.95	0.90	0.85	1.40	1.20	1.10	1.00	0.90	0.85	
200	130 x 75	1.80	1.60	1.50	1.40	1.35	1.25	2.10	1.80	1.60	1.45	1.35	1.25	
	130 x 77	1.80	1.60	1.50	1.40	1.35	1.30	2.10	1.80	1.65	1.50	1.35	1.30	
	150 x 75	2.05	1.85	1.75	1.60	1.55	1.45	2.40	2.10	1.85	1.70	1.55	1.45	
_	150 x 77	2.05	1.90	1.75	1.65	1.55	1.50	2.45	2.10	1.90	1.70	1.60	1.50	
	95 x 45	1.00	0.90	0.80	0.75	0.70	0.65	1.05	0.90	0.80	0.70	0.60	0.55	
	95 x 47	1.00	0.90	0.85	0.75	0.70	0.65	1.10	0.95	0.80	0.70	0.65	0.60	
	95 x 63	1.10	1.00	0.95	0.90	0.80	0.75	1.25	1.10	0.95	0.85	0.80	0.70	
200	95 x 65	1.15	1.00	0.95	0.90	0.80	0.75	1.25	1.10	1.00	0.90	0.80	0.70	
300	130 x 75	1.65	1.50	1.35	1.30	1.20	1.15	1.90	1.65	1.45	1.30	1.20	1.10	
	130 x 77	1.65	1.50	1.40	1.30	1.25	1.15	1.90	1.65	1.45	1.35	1.25	1.15	
	150 x 75	1.90	1.70	1.60	1.50	1.40	1.30	2.15	1.90	1.70	1.55	1.40	1.30	
_	150 x 77	1.90	1.75	1.60	1.50	1.45	1.35	2.20	1.90	1.70	1.55	1.45	1.30	

## SHIFT 1 21 OCT 2017 Ultralam TM & E12 F14 SMK40289 AS/NZS 4357.0 C-

	95 x 45	0.95	0.85	0.75	0.70	0.65	0.60	0.95	0.80	0.70	0.60	0.55	0.50
	95 x 47	0.95	0.85	0.75	0.70	0.65	0.60	1.00	0.85	0.70	0.65	0.55	0.50
	95 x 63	1.05	0.95	0.85	0.80	0.75	0.70	1.15	1.00	0.90	0.75	0.70	0.65
400	95 x 65	1.05	0.95	0.90	0.80	0.75	0.70	1.15	1.00	0.90	0.80	0.70	0.65
400	130 x 75	1.55	1.40	1.30	1.20	1.10	1.05	1.75	1.50	1.35	1.20	1.10	1.00
	130 x 77	1.55	1.40	1.30	1.20	1.15	1.05	1.75	1.50	1.35	1.25	1.10	1.00
	150 x 75	1.80	1.60	1.50	1.40	1.30	1.20	2.00	1.75	1.55	1.40	1.25	1.15
	150 x 77	1.80	1.65	1.50	1.40	1.30	1.25	2.05	1.75	1.55	1.45	1.30	1.15
	95 x 45	0.90	0.80	0.70	0.65	0.60	0.55	0.90	0.75	0.65	0.55	0.50	0.45
	95 x 47	0.90	0.80	0.70	0.65	0.60	0.55	0.90	0.75	0.65	0.55	0.50	0.50
	95 x 63	1.00	0.90	0.80	0.75	0.70	0.65	1.05	0.90	0.80	0.70	0.65	0.55
	95 x 65	1.00	0.90	0.85	0.75	0.70	0.65	1.10	0.95	0.80	0.70	0.65	0.60
500	130 x 75	1.45	1.30	1.20	1.15	1.05	1.00	1.60	1.40	1.25	1.10	1.00	0.90
	130 x 77	1.45	1.35	1.25	1.15	1.05	1.00	1.65	1.40	1.25	1.10	1.00	0.90
	150 x 75	1.70	1.50	1.40	1.30	1.20	1.15	1.85	1.60	1.45	1.25	1.15	1.05
	150 x 77	1.70	1.55	1.45	1.35	1.25	1.15	1.90	1.65	1.45	1.30	1.15	1.05
	95 x 45	0.85	0.75	0.65	0.60	0.55	0.50	0.85	0.65	0.60	0.50	0.45	0.45
	95 x 47	0.85	0.75	0.65	0.60	0.55	0.50	0.85	0.70	0.60	0.55	0.50	0.45
	95 x 63	0.95	0.85	0.75	0.70	0.65	0.60	1.00	0.85	0.75	0.65	0.60	0.55
	95 x 65	0.95	0.85	0.80	0.70	0.65	0.60	1.00	0.90	0.75	0.65	0.60	0.55
600	130 x 75	1.40	1.25	1.15	1.05	1.00	0.90	1.50	1.30	1.15	1.00	0.90	0.80
	130 x 77	1.40	1.25	1.15	1.10	1.00	0.95	1.55	1.30	1.15	1.00	0.90	0.85
	150 x 75	1.60	1.45	1.35	1.25	1.15	1.05	1.75	1.50	1.30	1.15	1.05	0.95
	150 x 77	1.60	1.45	1.35	1.25	1.15	1.05	1.75	1.55	1.35	1.20	1.05	0.95
	95 x 45	0.70	0.60	0.55	0.50	0.45	0.40	0.65	0.50	0.45	0.40	0.40	0.35
	95 x 47	0.70	0.60	0.55	0.50	0.45	0.40	0.65	0.55	0.45	0.40	0.40	0.35
	95 x 63	0.80	0.70	0.65	0.60	0.55	0.50	0.80	0.65	0.55	0.50	0.45	0.45
	95 x 65	0.80	0.70	0.65	0.60	0.55	0.50	0.80	0.65	0.55	0.50	0.45	0.45
1000	130 x 75	1.20	1.05	0.95	0.85	0.80	0.75	1.25	1.00	0.85	0.75	0.70	0.65
	130 x 77	1.20	1.10	0.95	0.90	0.80	0.75	1.25	1.05	0.90	0.80	0.70	0.65
	150 x 75	1.40	1.25	1.10	1.00	0.95	0.85	1.45	1.15	1.00	0.90	0.80	0.75
	150 x 77	1.40	1.25	1.10	1.00	0.95	0.90	1.45	1.20	1.00	0.90	0.85	0.75

#### Notes:

- **1.** Member deflections are limited to span/270 (Class III formwork limit in accordance with AS 3610.1-2010). However, this does not guarantee compliance with Class III criteria since other components outside the scope of this table contribute to the form face deflection.
- 2. Spans allow for a stacked materials loading of 4 kPa.
- 3. Members are assumed to have a moisture content <15%. The span table shall not be relied upon where members are used in a wet condition (moisture content >15%). For moisture contents > 15% designers must incorporate the deformation factor (j2) from AS1720.1-2010.
- **4.** Interpolation of spans for intermediate concrete thicknesses is permitted. Extrapolation is not permitted.
- **5.** Continuous span members includes 2 or more equally spaced spans with uniformly distributed loading.

#### **BUILD SAFELY**

MLT Ltd. are committed to work safely and want to remind you to do the same. We encourage you to follow recommendations regarding:



Personal protective equipment for hands, feet, head and eyes



Fall protection



Product performance specification

### STORAGE AND HANDLING RECOMMENDATIONS



Keep LVL formwork beams in dry and well ventilated area



Re-seal cut edges with acrylic paint



Wet members and sheets should have spacers between layers to allow to dry out



Do not use LVL formwork beams over spans greater than those recommended in present brochure



# ULTRALAM LVL FORMWORK SOLUTIONS



Modern Lumber Technology Ltd. (MLT Ltd.)
Head office

14-A, Bolshaya Morskaya Str., 191186, Saint-Petersburg, Russia

**Phone Int'Sales** +7 812 612 0899

Ph/Fax +7 812 571 6164

**E-mail** sales@mltlvl.com www.ultralam.com