

BTU ANALYSIS FOR L&L LIBERTY-BELLE KILNS FOR HVAC CALCULATIONS

These tables can be used to calculate maximum BTU output into a room when firing a kiln at various temperatures. It is meant for HVAC calculations.

The following table is for Liberty-Belle kilns with 2-1/2" thick brick:

MODEL NUMBER	INTERIOR DIMENSIONS		CUBIC FEET	K.W	Total Internal	Total Internal	Watts per internal	Total BTU loss/Hr	Total BTU loss/Hr	Total BTU loss/Hr
	DIAM	HIGH			Sq Feet	Sq Inches	Sq Inch	at 1800F	at 2000F	at 2350F
LB18	17 1/2	18	2.6	5.5	10.8	1552	3.54	6723	7876	9772

BTU'S HEAT LOSS PER SQ FT PER HOUR AT 1800 DEGF:	624	BTU's per Square Foot per hour with 2-1/2" brick
BTU'S HEAT LOSS PER SQ FT PER HOUR AT 2000 DEGF:	731	BTU's per Square Foot per hour with 2-1/2" brick
BTU'S HEAT LOSS PER SQ FT PER HOUR AT 22350 DEGF:	907	BTU's per Square Foot per hour with 2-1/2" brick

The following table is for Liberty-Belle kilns with 3" thick brick:

MODEL NUMBER	INTERIOR DIMENSIONS		CUBIC FEET	K.W	Total Internal	Total Internal	Watts per internal	Total BTU loss/Hr	Total BTU loss/Hr	Total BTU loss/Hr
	DIAM	HIGH			Sq Feet	Sq Inches	Sq Inch	at 1800F	at 2000F	at 2350F
LB18-3	16 1/2	18	2.5	5.5	10.6	1523	3.61	5561	6502	8067

BTU'S HEAT LOSS PER SQ FT PER HOUR AT 1800 DEGF:	526	BTU's per Square Foot per hour with 3" brick
BTU'S HEAT LOSS PER SQ FT PER HOUR AT 2000 DEGF:	615	BTU's per Square Foot per hour with 3" brick
BTU'S HEAT LOSS PER SQ FT PER HOUR AT 22350 DEGF:	763	BTU's per Square Foot per hour with 3" brick