

BTU ANALYSIS FOR L&L SCHOOL-MASTER 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 School-Master 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
2-1/2" Brick										
SM23T	23 3/8	27	7.0	10.6	20.5	2952	3.59	12791	14985	18593

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 School-Master 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
3" Brick										
SM23T-3	22 3/8	27	6.7	10.6	20.2	2914	3.64	10643	12444	15439
SM28T-3	28	27	10.2	13.7	26.5	3813	3.59	13928	16285	20204

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