

EXTRACTION CANOPY FLOW RATE CALCULATIONS - THERMAL CONVECTION METHOD

| ITEM | POWER | WIDTH mm | DEPTH mm | AREA | TCC | FLOW RATE |
|---|-------|----------|----------|------|------|-----------|
| BENCH | N/A | 300 | 800 | 0.24 | 0.03 | 0.0072 |
| BENCH | N/A | 600 | 800 | 0.48 | 0.03 | 0.0144 |
| BENCH | N/A | 900 | 800 | 0.72 | 0.03 | 0.0216 |
| PASTA COOKER | GAS | 450 | 800 | 0.36 | 0.3 | 0.108 |
| OPEN TOP RANGE/OVEN | GAS | 900 | 800 | 0.72 | 0.35 | 0.252 |
| COMBI OVEN | ELEC | 900 | 900 | 0.81 | 0.3 | 0.243 |
| GRIDDLE/MILD STEEL | GAS | 450 | 800 | 0.36 | 0.3 | 0.108 |
| DEEP FAT FRYER/HEAVY DUTY | GAS | 450 | 800 | 0.36 | 0.5 | 0.18 |
| SALAMANDER GRILL | GAS | 900 | 400 | 0.36 | 0.75 | 0.27 |
| CHARGRILL | GAS | 450 | 800 | 0.36 | 0.95 | 0.342 |
| Theoretical Extraction Volume Required in M3/sec | | | | | | |
| Canopy Factor | | | | | | |
| Required Specific Extract Flow Rate | | | | | | |
| Required Specific Replacement Air Flow Rate At 85% Of Extraction Rate | | | | | | |
| Calculations Are For Ventilation Of Equipment Below The Canopy & Do Not Allow For General Kitchen Ventilation | | | | | | |
| All As Per DW172 Section 5 | | | | | | |

Notes:

Multiplying Velocity Method - Canopy Length x Canopy Depth x Loading = 6M x 1.2M x 0.35M/sec = 2.52M3/s

Multiplying Factors - 0.25 Light Loading, 0.35 Medium Loading, 0.5 Heavy Loading

Spigot At Canopy - 0.5M x 0.57M = 0.285sqM x 6 = 1.71M3/s

Fire Rating Requirements?

Odour Control Requirements?

Noise Pollution Requirements?