27. FORCED AIR CONVECTION OVEN REQUIRED ON PROJECTS WITH 5,000 OR MORE TONS OF HMA OR WHEN SPECIFIED IN THE PLANS. THE FORCED AIR OVEN REPLACES THE RANGE THE OVEN SHALL BE RATED TO AT LEAST 300 WATTS INCLUDING:
1. AT LEAST TWO BURNERS TO CIRCULATE AIR INSIDE WORMS ENTITLING THE OVEN TO BE PLACED IN THE OVEN.
2. A MINIMUM ENTERED CAPACITY OF 4.8 CUBIC FEET.
3. AN EXHAUST CHAMBER SHAPED TO CONNECT TO A 3 INCH PIPE WHICH SHALL BE HEATED TO THE OUTSIDE.
4. AT LEAST TWO ADJUSTABLE SHELVES.
5. AN OVER-TEMPERATURE PROTECTION DEVICE.
6. AN ELECTRONIC CONTROL SYSTEM WITH EXTERNAL TEMPERATURE READOUT AND EXTERNAL TEMPERATURE SET POINTS TO PRECISELY READ AND SET THE OVEN TEMPERATURE.

THE OVEN SHALL HAVE A TEMPERATURE RANGE FROM 204 °F TO 482 °F AND HAVE A UNIFORM TEMPERATURE OF ± 3 °F AT 330 °F. THE OVEN SHALL BE CAPABLE OF MAINTAINING A CONSTANT TEMPERATURE ± 3 °F THROUGHOUT ITS TEMPERATURE RANGE.

THE HEATING ELEMENTS SHALL NOT BE ALLOWED TO OPERATE WITHIN THE SLEEVES.

THE FIELD LABORATORY SHALL BE EQUIPPED WITH A SEPARATE ELECTRICAL CIRCUIT TO SUPPLY POWER TO THE FORCED CONVECTION OVEN.

IN ADDITION TO THE ABOVE FORCED CONVECTION OVEN 615 TYPE ELEMENTS, THE FOLLOWING SHALL BE PROVIDED:
1. TWO BURNERS, FEMALE ELECTRICAL 120V SINGLE PHASE TYPE.
2. AT LEAST TWO BURNERS SHALL BE RATED A MINIMUM OF 800 WATTS.
3. EACH HOT PLATE SHALL BE EQUIPPED WITH AN OFF Switch INDICATOR LIGHT.

28. CONCRETE VACUUM 120 GALLON CAPACITY WITH A CIRCULATING PUMP WITH A 5 HP RATING. TANK CAPACITY WILL INCREASE FOR LARGE CONCRETE PROJECTS WHEN SPECIFIED IN THE PLANS.