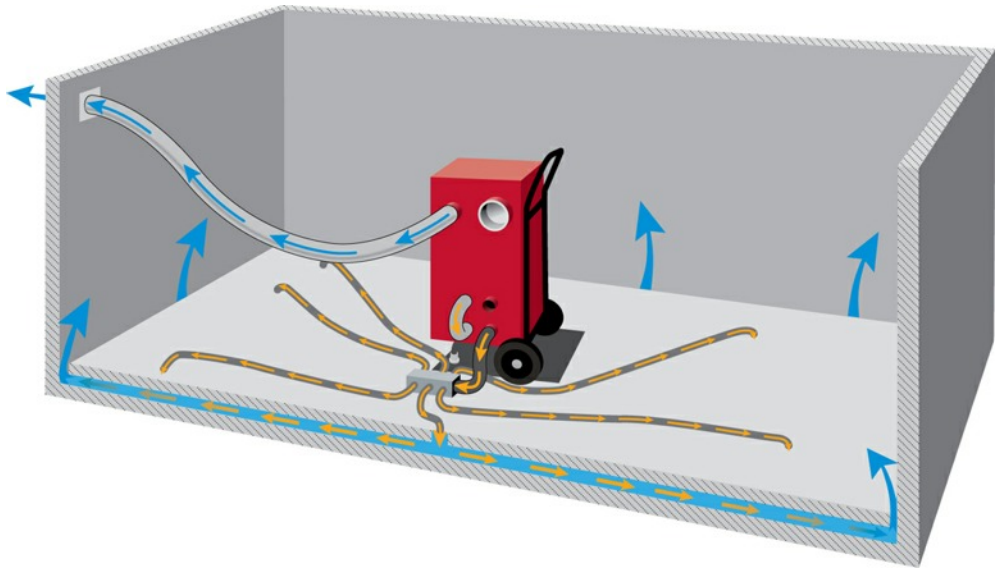
Injection drying installation

An injection drying system is set up to address moisture within cavities and insulation.

Generally this comprises of a Kombi unit which produces very dry air and delivers it at pressure through a pipe system. Standard pipe systems utilise either 25mm diameter pipe or 16mm diameter pipes depending on the installation requirements.

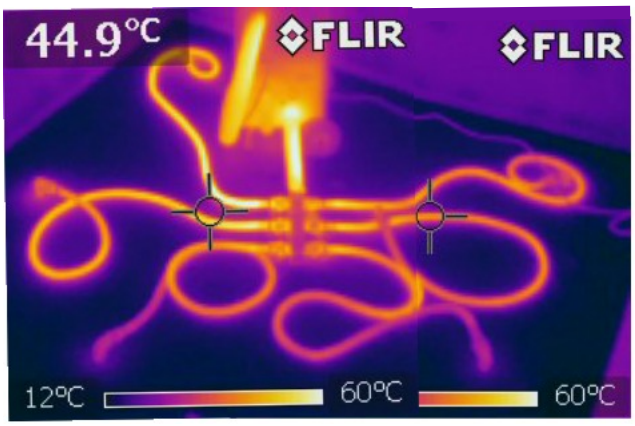
Kombi's deliver 80m³ (Kombi 100) to 150m³ (Kombi 150) of air at circa 35-40 °C and around 10%RH. As this dry air is forced through the cavity / material moisture is picked up. Pressures of up to 260mbar can be achieved by these machines. This ensures that all the effected areas can be addressed. This moist air will then vent to atmosphere via vent holes or built in vent points. The internal moisture created by the system will require venting alternately this can be addressed by either supplementary dehumidification or the fixed HVAC installation.



Monitoring of the drying process is carried out by measuring the specific moisture content of air within the system. For example:

Ambient Environment (air taken into the unit)	20°C 55%RH = 8.1g/kg
Air being fed to pipe system	38°C 10%RH = 4.1g/kg
Air being vented from cavity	27°C 55%RH = 12.4g/kg

From the above we can determine that the cavity is wet. Air that contains only 4.1g/kg is being fed into the cavity however the venting has a high moisture content at 12.4g/kg. When these figure become close in specific moisture content this indicates that excess moisture has been removed. The actual target figure will depend on the specific loss conditions.



Typical installation showing heat generated by pressurised dry air during floor drying.