

Interpretation Of EVT Results

BS EN 15780:2025 - Annex I.3

Analysis Procedure

- 1) In the case of post-clean verification measurement, the filters alone are weighed, i.e. the difference between the two matched weight filters, or the gain in weight on the pre-weighed filter gives the raw result.
- 2) In the case of measurement of probable dirty surfaces, where loose dust is likely to have been captured in the sampling capsule but not impinged on the filter(s), a different analysis methodology is employed as follows:
 - a) The entire cassette is weighed.

METHOD FOR MATCHED WEIGHT FILTERS

- b) The cassette housing is weighed after the filters and loose dust have been removed and put to one side.
- c) The bottom (clean) of the matched weight filters is weighed and the value multiplied by 2.

The total dust collected in the cassette is calculated as: (a-b-c).

METHOD FOR PRE-WEIGHED FILTER

- d) The cassette housing is weighed after the filter and loose dust have been removed and put to one side.
- e) The weight gain on the pre-weighed filter is measured.

The total dust collected in the cassette is calculated as: (a-d+e)

Acceptable **PRE CLEAN** dust accumulation levels for **EXISTING** ductwork.

Cleanliness quality class	Acceptable cleanliness level Supply ductwork	Acceptable cleanliness level Recirculation or secondary air ductwork
Low	< 4,5 g/m ²	< 6,0 g/m ²
Medium	< 3,0 g/m ²	< 4,5 g/m ²
High	< 0,6 g/m ²	< 3,0 g/m ²

Acceptable **PRE CLEAN** dust accumulation levels for **NEWLY INSTALLED** ductwork.

Cleanliness quality class	Acceptable dust accumulation level Supply, recirculation or secondary air ductwork	Acceptable dust accumulation level Extract ductwork
Low	< 0,9 g/m ²	< 1,8 g/m ²
Medium	< 0,6 g/m ²	< 1,8 g/m ²
High	< 0,3 g/m ²	< 0,9 g/m ²

The acceptable dust accumulation level for ALL POST CLEAN samples is < 0,3 g/m².

Quality Class	Typical examples
Low	rooms with only intermittent occupancy e.g. storage rooms, technical rooms
Medium	offices, hotels, restaurants, schools, theatres, residential homes, shopping areas, exhibition buildings, sport buildings, general areas in hospitals and general working areas in industries
High	Laboratories, treatment areas in hospitals high quality offices

The acceptable dust accumulation level for pre clean samples taken from extract systems is < 9,0g/m².