

18327 TBC Diagnostic Laboratorie
Standard Design

List of ventilation components

Stand 28.07.2011

| position | position specifications | description | amount | unit |
|----------|-------------------------|---|---------------------------------|-------|
| | | 1. Ventilation Components Standard Design | | |
| | | 1.1. Air Handling Units | | |
| 10 | 1.1.10. | Supply air Unit, about 2,265 cbm/h with following componets: - multi leaf damper with motor (outside air) - pre-filter F7 - ventilator speed controled, ext. Pressure about 700 Pa - cooler, consist of a direct evaporater and a compressor unit (design according to the outside air conditions of each country and region) - reheater electr. (design according to the outside air conditions of each country and region) - steam humidifier (optional, design according to the outside air conditions of each country and region) - filter F9 - multi leaf damper with motor (supply air) | 2 | piece |
| 20 | 1.1.20. | re-cooling unit (codenser) as an outside unit (design according to the outside air conditions of each country and region) | 1 | piece |
| 30 | 1.1.30. | roof exhaust fan for BSC about 1,100 cbm/h; speed controlled; made of plastic (especially for laboratories) with an non-return valve on the intake side. | 2 | piece |
| 40 | 1.1.40. | roof exhaust fan for room air about 1,365 cbm/h; speed controlled; made of plastic (especially for laboratories) with an non-return valve on the intake side. | 2 | piece |
| | | 1.2. Built-in Units Ventilation | | |
| 50 | 1.2.10. | weather protection grille grille for outside air about 2,265 cbm/h (design for free cross section 2 m/s) | 1 | piece |
| 60 | 1.2.20. | sound absorber for outside air about 2,265 cbm/h; (600 mm / 300 mm/ 1500 mm) | 1 | piece |
| 70 | 1.2.20. | sound absorber for supply air about 2,265 cbm/h; (600 mm / 300 mm/ 1500 mm) | 1 | piece |
| 80 | 1.2.30. | variable volume flow conroller with additional sound absorber for supply air about 270 cbm/h (Ø 250 mm) | 1 | piece |
| 90 | 1.2.30. | variable volume flow conroller with additional sound absorber for supply air about 375 cbm/h (Ø 250 mm) | 1 | piece |
| 100 | 1.2.30. | variable volume flow conroller with additional sound absorber for supply air about 1,620 cbm/h (Ø 250 mm) | 1 | piece |
| 110 | 1.2.40. | variable volume flow conroller for exhaust air BSC; made of plastic (especially for laboratories) for about 550 cbm/h (Ø 250 mm) | 2 | piece |
| 120 | 1.2.50. | variable volume flow conroller room exhaust air; made of plastic (especially for laboratories) for about 320 cbm/h (Ø 250 mm) | 1 | piece |
| 130 | 1.2.50. | variable volume flow conroller room exhaust air; made of plastic (especially for laboratories) for about 425 cbm/h (Ø 250 mm) | 1 | piece |
| 140 | 1.2.50. | variable volume flow conroller room exhaust air; made of plastic (especially for laboratories) for about 620 cbm/h (Ø 250 mm) | 1 | piece |
| 150 | 1.2.60. | fire damper for supply air for about 270 cbm/h (250 mm / 200 mm). | 1 | piece |
| 160 | 1.2.70. | fire damper for supply air for about 375 cbm/h (250 mm / 250 mm). | 1 | piece |
| 170 | 1.2.80. | fire damper for supply air for about 1,620 cbm/h (450 mm / 400 mm). | 1 | piece |
| 180 | 1.2.90. | fire damper coated for exhaust air for about 550 cbm/h (250 mm / 250 mm). | 2 | piece |
| 190 | 1.2.100. | fire damper coated for exhaust air for about 320 cbm/h (250 mm / 200 mm). | 1 | piece |
| 200 | 1.2.90. | fire damper coated for exhaust air for about 425 cbm/h (250 mm / 250 mm). | 1 | piece |
| 210 | 1.2.110. | fire damper coated for exhaust air for about 620 cbm/h (300 mm / 300 mm). | 1 | piece |
| 220 | 1.2.120. | supply-air outlet for about 270 cbm/h (400 mm / 400 mm). | 1 | piece |
| 230 | 1.2.130. | supply-air outlet for about 375 cbm/h (600 mm / 600 mm). | 1 | piece |
| 240 | 1.2.130. | supply-air outlet for about 405 cbm/h (600 mm / 600 mm). | 2 | piece |
| 250 | 1.2.140. | exhaust air hood for BSC with HEPA-filter (H14) and non-return valve for about 550 cbm/h. | 2 | piece |
| 260 | 1.2.150. | exhaust air outlet with HEPA-filter (H14) for about 320 cbm/h (400 mm / 400 mm). | 1 | piece |
| 270 | 1.2.160. | exhaust air outlet with HEPA-filter (H14) for about 425 cbm/h (600 mm / 600 mm). | 1 | piece |
| 280 | 1.2.160. | exhaust air outlet with HEPA-filter (H14) for about 310 cbm/h (600 mm / 600 mm). | 2 | piece |
| 290 | 1.4.10. | differential pressure display for any adjacent room with a connecting door to the lab. | as needed number of doors/rooms | piece |
| 300 | 1.4.20. | differential pressure display for (connection to zero pressure line) with alarmhorn an connection of outlet volume flow controller. | 1 | piece |

| | | | | |
|-----|--------------------|---|-----------|----------------|
| | 1.3. | Ventilation ducts and pipes for supply air | | |
| 310 | 1.3.10. | galvanized air duct for main strands (air speed about 5-6 m/s) | as needed | m ² |
| 320 | 1.3.20. | galvanized air duct-moulding for main strands (air speed about 5-6 m/s) | as needed | m ² |
| 330 | 1.3.30. | galvanized ventilation pipe for branch duct to the supply air outlets (air speed about 4 m/s) | as needed | m |
| 340 | 1.3.40. | galvanized ventilation pipe bend for branch duct to the supply air outlets (air speed about 4 m/s) | as needed | piece |
| 350 | 1.3.40. | galvanized ventilation pipe-T-piece for connecting line from main line to the supply air outlets (air speed about 4 m/s) | as needed | piece |
| 360 | 1.3.40. | galvanized ventilation pipe-reduction for connecting line from main line to the supply air outlets (air speed about 4 m/s) | as needed | piece |
| 370 | 1.3.50. | alu-flexible tube for connecting to the supply air outlets (air speed about 4 m/s) | as needed | m |
| | | Ventilation ducts and pipes for exhaust air | as needed | |
| 380 | 1.3.60. | air duct made of plastic (especially for laboratories) for main strands (air speed about 5-6 m/s) | as needed | m ² |
| 390 | 1.3.70. | air duct-moulding made of plastic (especially for laboratories) for main strands (air speed about 5-6 m/s) | as needed | m ² |
| 400 | 1.3.80. | ventilation pipe made of plastic (especially for laboratories) for branch duct to the supply air outlets (air speed about 4 m/s) | as needed | m |
| 410 | 1.3.90. | ventilation pipe bend made of plastic (especially for laboratories) for branch duct to the supply air outlets (air speed about 4 m/s) | as needed | piece |
| 420 | 1.3.90. | ventilation pipe-T-piece made of plastic (especially for laboratories) for connecting line from main line to the supply air outlets (air speed about 4 m/s) | as needed | piece |
| 430 | 1.3.90. | ventilation pipe-reduction made of plastic (especially for laboratories) for connecting line from main line to the supply air outlets (air speed about 4 m/s) | as needed | piece |
| 440 | | flexible tube made of plastic (especially for laboratories) for connecting to the supply air outlets (air speed about 4 m/s) | as needed | m |
| | | Control equipment | | |
| 450 | 1.4.30. 1.4.40. | measuring and control equipment inclusive cabling for all positions ahead with room pressure control via outlet air, constant supply air volume flow, temperature control via room temperature or outlet air temperature. | 1 | piece |