

ANNEX I.A - AIR QUALITY-1

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution from building materials.	Limit the use of materials emitting named pollutants to those meeting acceptable performance standards.	Limitation of materials emitting named pollutants in defined circumstances and quantities. ----- Concentration of pollutants in indoor air under defined circumstances. ----- Methods of design, construction or installation.	Building materials and materials used in construction products.	Emission of volatile organic compounds and other pollutants. Susceptibility to the growth of micro-organisms. Radioactive emissions.
	Provide barriers to limit emissions to the indoor air.	Concentration of pollutants in indoor air. Methods of design, construction or installation.	Sealing coatings. Sealants.	Effectiveness in reducing emissions. Effectiveness in sealing gaps.

ANNEX I.A - AIR QUALITY-2

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution from building materials.	Dilute or remove pollutants by ventilation.	a) Concentration of pollutants in indoor air. b) Air change rate. c) Air leakage characteristics of works.  Methods of design, construction or installation.  Provision and siting of air inlets and area of opening and provision of mechanical ventilation devices.	Air-conditioning and ventilation.	Airflow, air velocity and pressure difference performance.  Ease of cleaning and maintenance.

ANNEX I.A - AIR QUALITY-3

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution from subsoil.	Seal air passages from subsoil.	Concentration of pollutants in indoor air. Effectiveness of sealing.	Sealants, mastics. Membranes.	Effectiveness in sealing gaps. Effectiveness in reducing flow of pollutants.
	Ventilate spaces under floors.	Concentration of pollutants in indoor air. Air change rate in underfloor spaces.	Components of underfloor ventilation systems.	Air flow performance. Ease of cleaning and maintenance.
	Remove pollutants from subsoil in vicinity of building.	Concentration of pollutants in indoor air.	Components of equipment for removing pollutants.	Air flow performance. Ease of cleaning and maintenance.
	Dilute or remove pollutants by ventilation.	see table I.A-2		
Pollutants from people, animals and plants.	Dilute or remove pollutants by ventilation.	see table I.A-2		

ANNEX I.A - AIR QUALITY-4

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution from water storage and supply.	Prevent legionella bacteria and other harmful micro-organisms in aerosols.	Levels of legionella in systems.	Hot water storage and supply.	Temperature control. Minimisation of aerosols. Stratification minimisation. Minimise static water. Avoid materials which provide nutrients. Design systems to facilitate cleaning.
	Design systems to facilitate testing, cleaning and chemical treatment.	Freedom from nutrients in systems.		
	Design systems to maintain throughout temperatures which are not conducive to the growth of legionella.	Cold water temperature. Hot water storage temperature. Limitation of stratification. Materials used in systems.		
	Design systems to avoid stagnation.	Absence of deadlegs.		

ANNEX I.A - AIR QUALITY-5

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution from combustion equipment.	Avoid harmful concentrations of combustion products by provision of adequate flues, chimney liners and air inlets and control of leakage of combustion products and flue gases from combustion equipment.	Concentration of pollutants in indoor air.  Methods of design, construction or installation.	Combustion appliances (with and without connection to flues).	Control of emission of pollutants during normal use.
			Fail-safe devices and other control equipment.	Effectiveness and reliability.
			Air inlets.	Adequate rating and dimensions.
			Flues and liners.	Dimensions.  Thermal and flow properties.  Effectiveness of removing combustion products.

ANNEX I.A - AIR QUALITY-6

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution from : Building services; Ventilation systems; Air-conditioning systems.	Prevent growth of harmful organisms and emission of pollutants.	Choice of suitable materials. Concentration of pollutants in indoor air. Methods of design, construction and installations.	Filtration systems.	Effectiveness in cleaning air. Air flow rate and pressure difference performance.
	Control of humidity in indoor air.	Humidity level in indoor air.	Humidifiers. Dehumidifiers.	Effectiveness in control of water vapour.

ANNEX I.A - AIR QUALITY-7

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Pollution by outdoor air.	Clean incoming air.	Concentration of pollutants in cleaned indoor air.  Design and siting of air intake and discharge.	Filters.	Effectiveness in cleaning air.  Airflow rate and pressure difference performance.
	Seal uncontrolled air passages.	Concentration of pollutants in indoor air.	Sealants.	Effectiveness in sealing gaps.

ANNEX I.B - DAMPNESS-1

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Humidity in the air of rooms.	Provide acceptable values for the relative air humidity.	<p>Provide appropriate air temperature.</p> <p>Provide appropriate air exchange and humidity of incoming or indoor air.</p> <p>Remove or reduce moisture at source or isolate moisture- generating activities.</p> <p>Provide appropriate controls and instrumentation.</p>	<p>Heating equipment.</p> <p>Air-conditioning and ventilation equipment, including dehumidifiers.</p> <p>Control equipment.</p>	<p>Output.</p> <p>see I.A-2.</p> <p>Effectiveness, reliability and accuracy.</p>

ANNEX I.B - DAMPNESS-2

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Dampness on indoor surfaces and inside products.	Avoid mould growth on indoor surfaces or inside products.	Provide appropriate air temperature.	Heating/cooling equipment.	Output (see table I.A)
	Limit increased deposit of house dust mites.	Provide appropriate air exchange and humidity of incoming or indoor air.	Air-conditioning and ventilation equipment including humidifiers, dehumidifiers.	see table I.A2
	Limit condensation on surfaces and interstitial condensation.	Provide appropriate insulation and design, avoid cold bridges.	Insulating elements, such as walls, windows, roofs and ground floors.	Thermal characteristics (see ID No 6).
		Prevent life-sustaining basis for mould.	Fungicides for treatment of surfaces.	Airtightness. Effectiveness.

ANNEX I.B - DAMPNESS-3

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Dampness on indoor surfaces and inside products.	Avoid infiltration and penetration of precipitation (rain, snow) and/or groundwater in the works.	Provide appropriate design.	Walls, walling materials.	Vapour permeability. Moisture resistance. Capacity of absorption/desorption Water tightness, water diffusivity. Thermal characteristics, see Interpretative Document on Energy Economy and Heat Retention.
			Curtain walling. Cladding materials. Cladding systems.	Vapour permeability. Water tightness. Resistance of joints to penetration of rain and snow.
			Roofs, roofing materials.	Vapour permeability. Capacity of absorption/desorption Moisture resistance. Watertightness Water diffusivity. Thermal characteristics (see ID No 6)

ANNEX I.B - DAMPNESS-4

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Dampness on indoor surfaces and inside products.			Ground floors (solid, suspended).	Moisture resistance. Thermal characteristics. Vapour permeability.
			Damp-proof courses, membranes.	Vapour permeability. Moisture resistance. Watertightness Water diffusivity.
			Vapour-proof membranes.	Vapour permeability. Moisture resistance.
			Insulation material.	Vapour permeability. Performance of joints. Moisture resistance. Thermal characteristics and design aspects.
			Copings.	Resistance to water. Performance of joints.
			Damp-proof trays.	Imperviousness to water.

## ANNEX II - WATER SUPPLY

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Water supply.	Appropriate use of products in systems and efficient maintenance.	Specify the design and the installation of systems.		
	Prevent mixing with polluted water.	Avoid backflow.	Back-flow devices.	Effectiveness. Flow-pressure drop. Mechanical endurance.
	Prevent mixing with external contaminants.	Not passing through hazardous areas.  Control tightness.	Pipes, fittings, joints.	Resistance to corrosion, to abrasion.  Permeability to pollutants.
	Avoid contamination of water by pollutants generated by materials in contact.	Limit migration from material.	All materials in contact with water.	Migration of pollutants.  Criteria for the growth of micro-organisms (geometrical forms).
		Limit pollutants resulting from corrosion ageing and erosion.	All materials in contact with water.	Resistance to corrosion, to abrasion.
	Avoid excessive micro-biological growth.	Appropriate design preventing dead zones.	Cisterns, tanks, pipes, fittings and joints	Shape. Tightness.

### ANNEX III - WASTE WATER DISPOSAL

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Waste water disposal.	Appropriate use of products in systems and efficient maintenance.	Specify the design and the installation of systems.		
	Prevent leakage from the system.	Control of watertightness.	Pipes, fittings, connections, manholes, joints.	Watertightness. Resistance to corrosion. Airtightness of discharges.
	Prevent sewage backflow in works.	Appropriate design or use of backflow preventers.	Backflow devices.	Effectiveness. Mechanical endurance.
	Prevent giving-off of foul air.	Appropriate design. Control Airtightness of covers.	Covers and other closure devices.	Airtightness.
	Prevent microbiological contamination.	Ensure cleanability.	Sanitary appliances.	Cleanability. Shape to facilitate self-cleaning.
			On-site treatment equipment.	Watertightness. Resistance to corrosion. Effectiveness of treatment.

ANNEX IV - SOLID WASTE DISPOSAL

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Solid waste disposal.	Prevent nuisances from storage and collection of solid waste.	Control tightness and cleanliness.	Storage products.	Shape and size to facilitate cleaning.
			Covers. Containers. Collection products.	Tightness.

## ANNEX V - OUTDOOR ENVIRONMENT

FIELD to be controlled	Requirements for works		Characteristics of products	
	Functional Requirements	Performance Requirements	Products or Product family	Characteristics
Impact on outdoor environment.	Prevention of leaching emission, dispersion of pollutants.	Measurement methods or calculation methods of leaching, emission and dispersion of pollutants.	Building materials : used in foundation pyles, external walls, external floors, roofs, granular materials.	- Release of pollutants to outdoor air, soil and water taking account of the concentration of pollutants in the products, if necessary.  - Release reducing factor by sealing.
			Vessels for storage of polluting substances and included sealing systems.	- Release of pollutants to soil, water and air.  - Tightness - effectiveness of alarm systems.
			Provide appropriate design.	Combustion equipment flues and chimneys.
	Prevention by effective measures of sealing, removal, cleaning operations and maintenance.	Method for sealing, removing, cleaning operations and maintenance.	Services and systems, air conditioning and ventilation systems, barriers and sealing systems, pipe systems.	- Release of pollutants to soil, water and air.