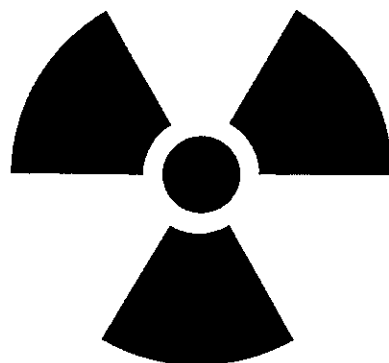
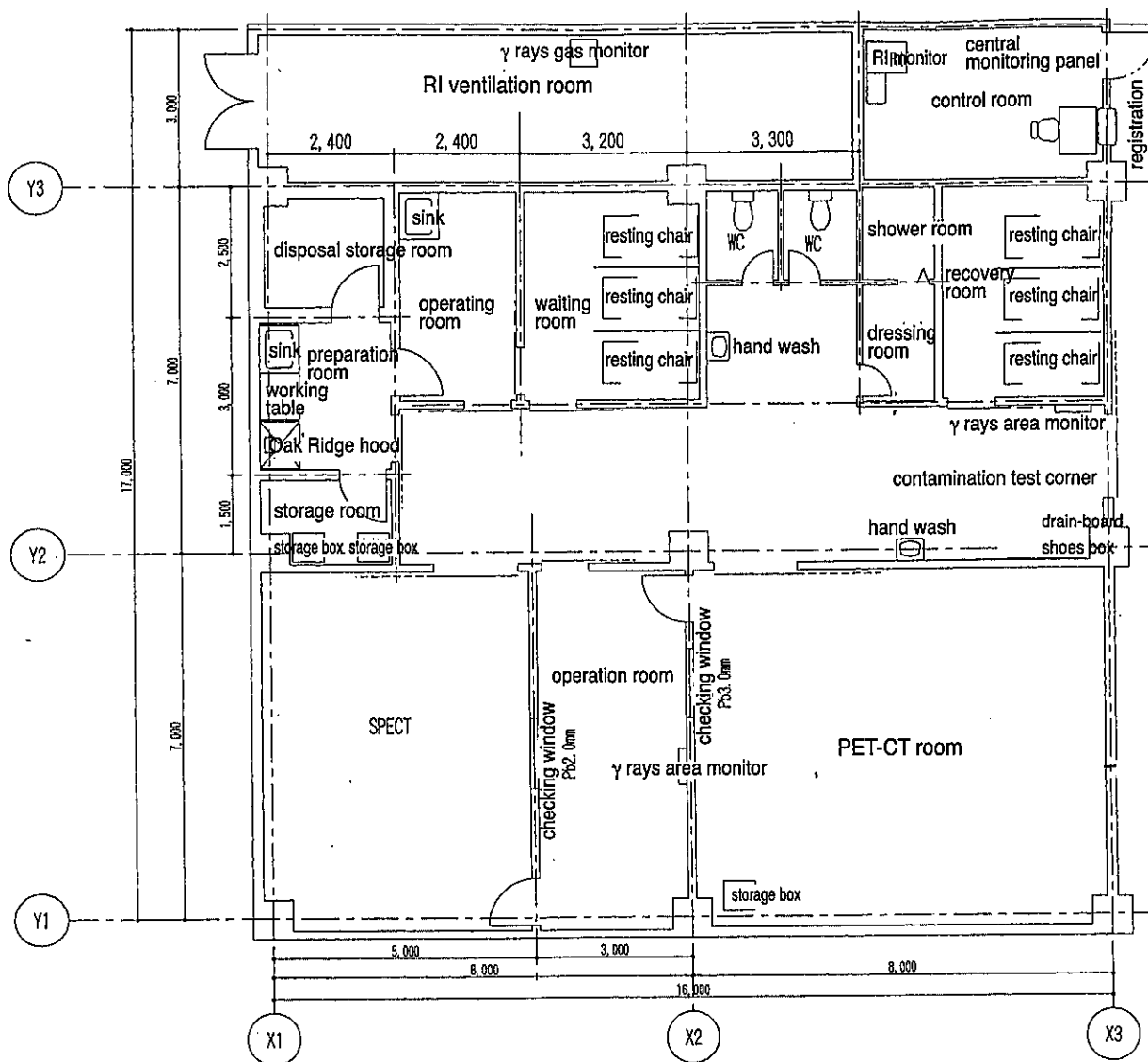


# Reference Data for RI Radiation Facilities



**Presented by Sangyo Kagaku Co., Ltd.**

## Recommended PET and SPECT Operating Facilities (overview drawing)



**Fireproof Construction for Storage Rooms for Stored and Disposed Materials**  
The doors must be a kind of a regulated special fireproof door with lock mechanism.

### (Points of Note for Selection of Finishing Materials)

- (1) use waterproof and chemical-proof materials.
- (2) the materials should be hard to be contaminated and easy to be cleaned.
- (3) use inflammable materials
- (4) the materials should have high mechanical strength.
- (5) use materials hard to corrode and infiltrate with water and vapor
- (6) the materials should have no projections, depressions or crevice on the surface.

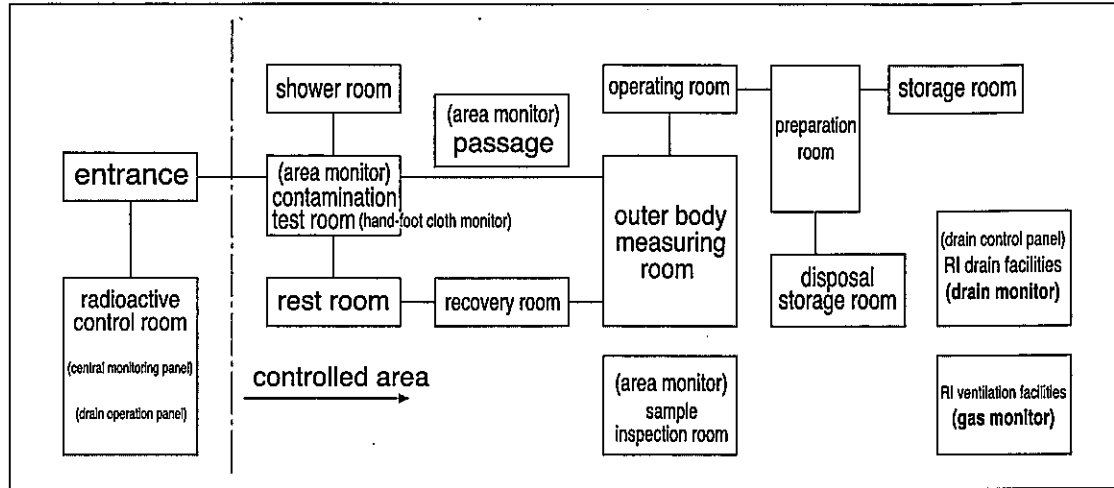
### (Samples for Recommended Lining Materials)

- Wall :**
- (1) vinyl chloride resin made washable paints, which are, as an anti-radio active paint, widely used in the RI operating facilities.
  - (2) vinyl chloride resin based enamel
  - (3) epoxy based anticorrosive paint

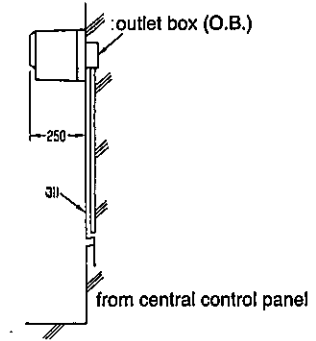
- Floor:**
- (1) non-saturated polyester resin based lining material
  - (2) bisphenol based non-saturated polyester made lining material
  - (3) epoxy resin made lining material
  - (4) vinyl chloride made long sticking flooring material with welding joint

**Others:** (1) no tile laying on the sink and in a restroom

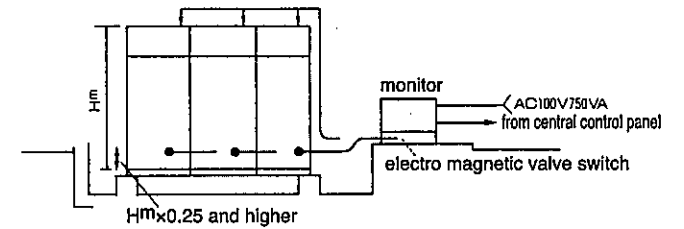
# RI monitoring system



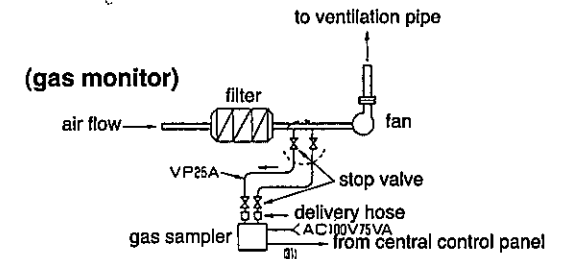
(area monitor)



(area monitor)

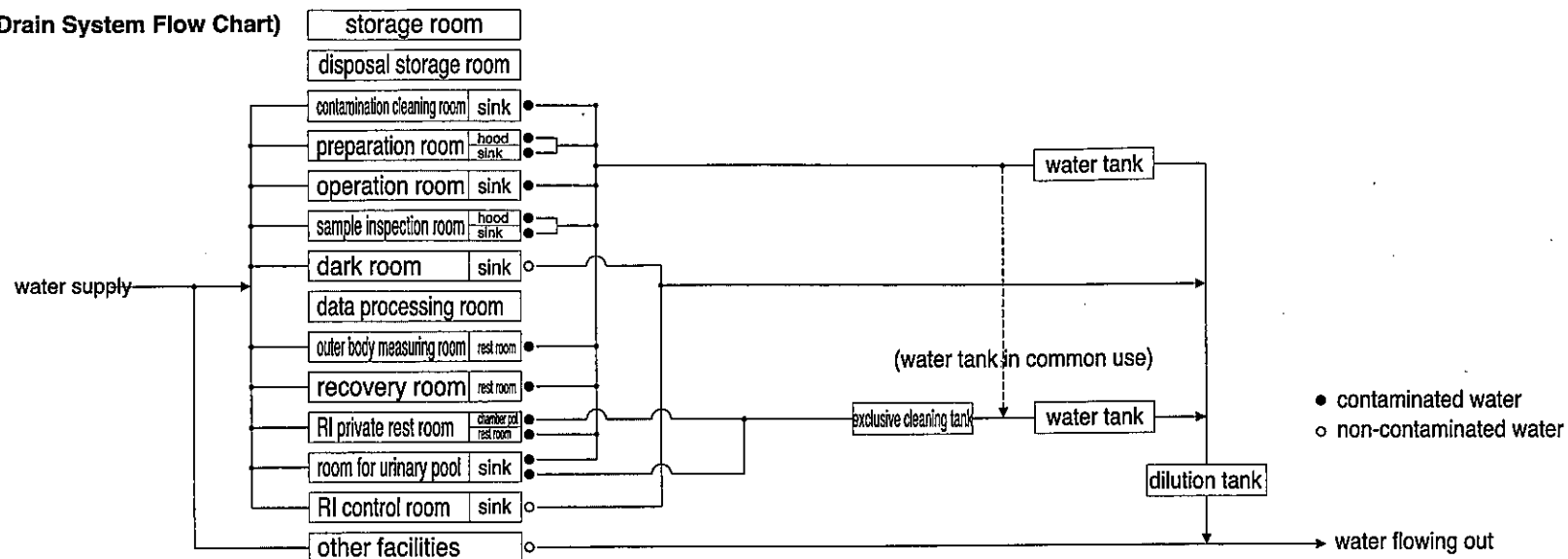


model name	power consumption	outside dimensions(WxDxH)	weight(kg)
$\gamma$ rays drain monitor		970 × 1000 × 1100	360
$\beta$ rays drain monitor		750 × 1000 × 1100	360
$\gamma$ rays gas monitor		547 × 428 × 790	270
$\beta$ rays gas monitor		547 × 428 × 940	130
$\gamma$ rays area monitor	from central control panel	620 × 250 × 220	10
hand-foot cloth monitor		480 × 860 × 1530	70
central monitoring panel SK-1501		564 × 400 × 1450	50
drain control panel	AC200V 10kVA AC100V 4kVA	1000 × 610 × 2000	180
drain operation panel	power received from the above	700 × 400 × 1400	50

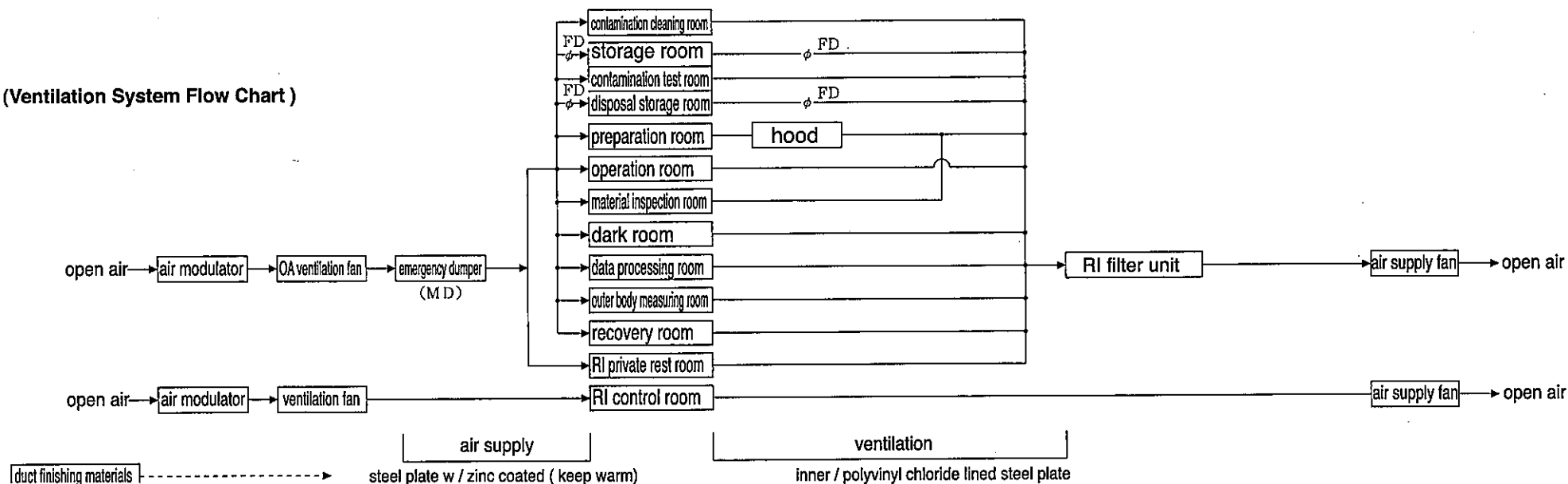


## Drain and Ventilation System Flow Chart of RI Facilities for Medical Treatment

**(Drain System Flow Chart)**



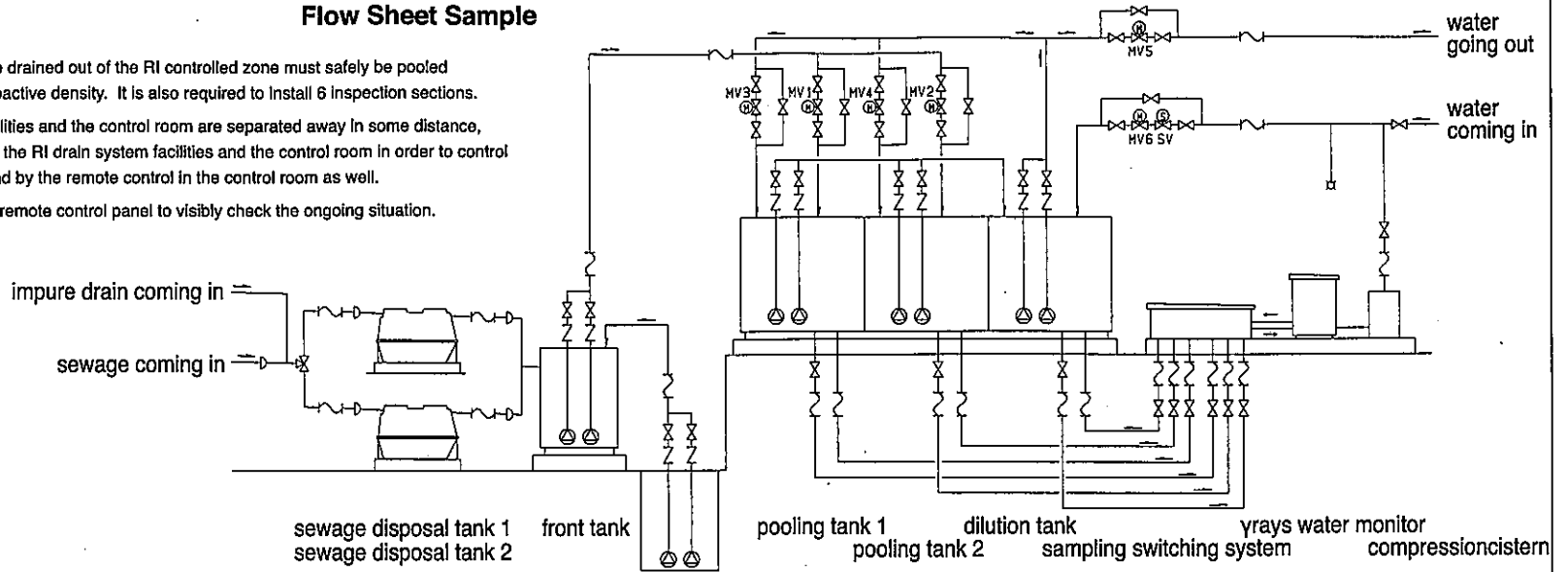
**(Ventilation System Flow Chart)**



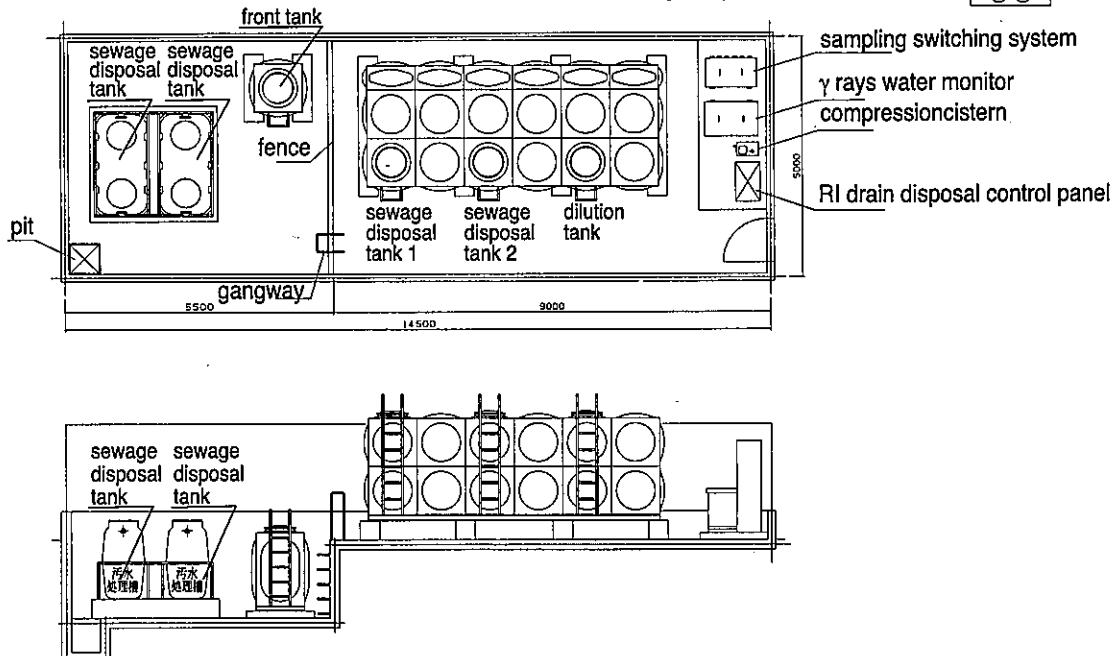
# RI Drain System

## Flow Sheet Sample

- There is a strict regulation, that the water to be drained out of the RI controlled zone must safely be pooled and diluted below the limited value of the radioactive density. It is also required to install 6 inspection sections.
- In case the location of the RI drain system facilities and the control room are separated away in some distance, it is required to install the control panel in both the RI drain system facilities and the control room in order to control the drain system directly within the facilities and by the remote control in the control room as well.
- It is important to install a graphic panel on the remote control panel to visibly check the ongoing situation.



## Recommended Sample



## specifications

product name	quantity	specifications
sewage disposal tank	2	FRP made septic tank of combined treatment
front tank	1	stainless444 1000×1000×1000mm
pooling tank	2	stainless444 1000×2000×3000mm
dilution tank	1	stainless444 1000×2000×3000mm
drain control panel	1	AC200V 10KVA AC100V 4KVA 1000×2000×600mm 200kg
water monitor	1	AC100V750VA 970×1100×1000

# RI Ventilation System Flow Chart (for use in hospital)

