Conceptual Design for Field Hospital

One world, one fight

Together we will get through this epidemic

China IPPR International Engineering Co.Ltd

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1. Basic principals

1) Safety and security

Comprehensive safety is put in the first priority. They include biological, structural electrical and mechanical environmental as well as life support system, fire prevention system.

2) Fast and ease to build

In order to gain the time, modular and standardized system are applied. Steel frame structure, prefabricated sanwich panels and roof plate are assembled on site. Other standard elements such as electrical transformer box, ready-made diesel engine kit, prefabricated waste water treatment tank, are adopted and equipped.

3) Flexibility

Composed from basic standard component sections. Various layout could be developed in according to the size of hospital and its individual field condition.

2. Basic component section

Code	Component Section	Zone in campus
F	Fast tract/Check in	Contaminate zone
M	Medical technical section	
	CT、DR	
	OT、CSSD、ESMO	
	ECG. Ultra sound	
R	RICU	
S	Standard ward	
Am	Ambulance wash disinfected shed	
W	Waste water treatment	
SW	Solid waste collection store	
V	Vacuum suction air shop	
E/M	Electric/mechanical shop	Restricted zone
O	Oxygen production shop or	
	Liquefied oxygen tank/cylinder	
Sto	Storage (Drug, Disposal, spare part)	
C	Canteen/catering kitchen	Living zone
T1	Temporary dormitory (Group 1)	
T2	Temporary dormitory (Group 2)	
A	Administration, information , Casier	

3. Critical points

1）Segregation of clean and contaminated zone

Inpatient ward and route are separated from medical staff working area and route.

When medical staff enter in or moving out from Inpatient ward or other contaminated working area, they have to pass through hygienic control suit.

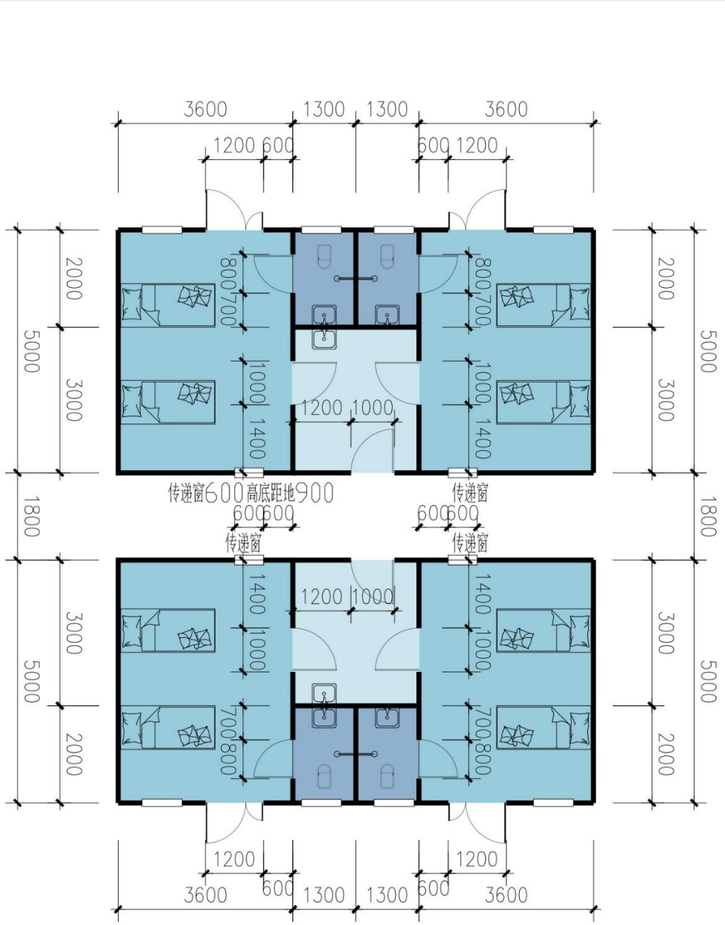
2） Solid waste has to be carefully collected in sealed barrel and disinfected before it transfer to incinerator station

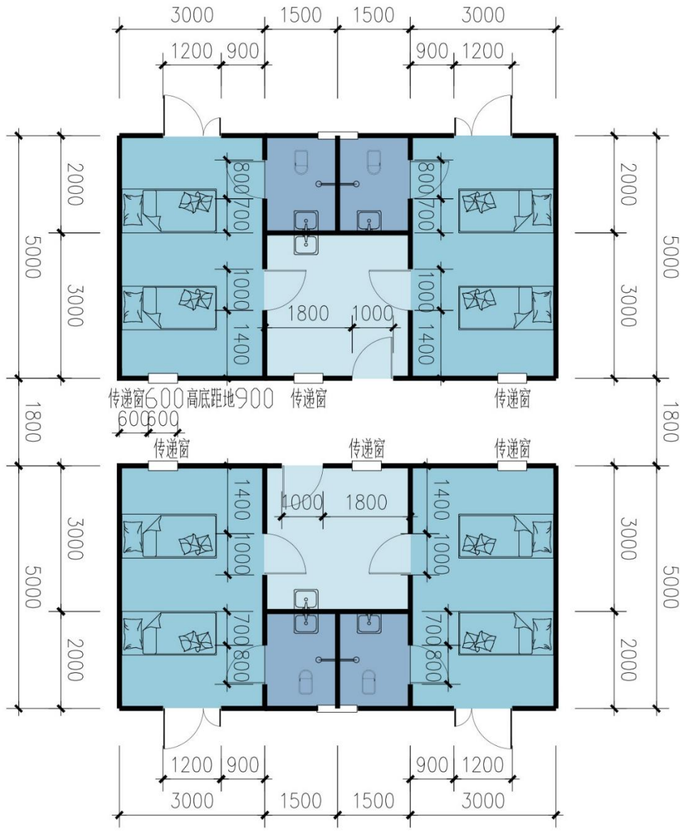
3）For biosafety reason, vacuum suction air station has to be located in contaminated zone.

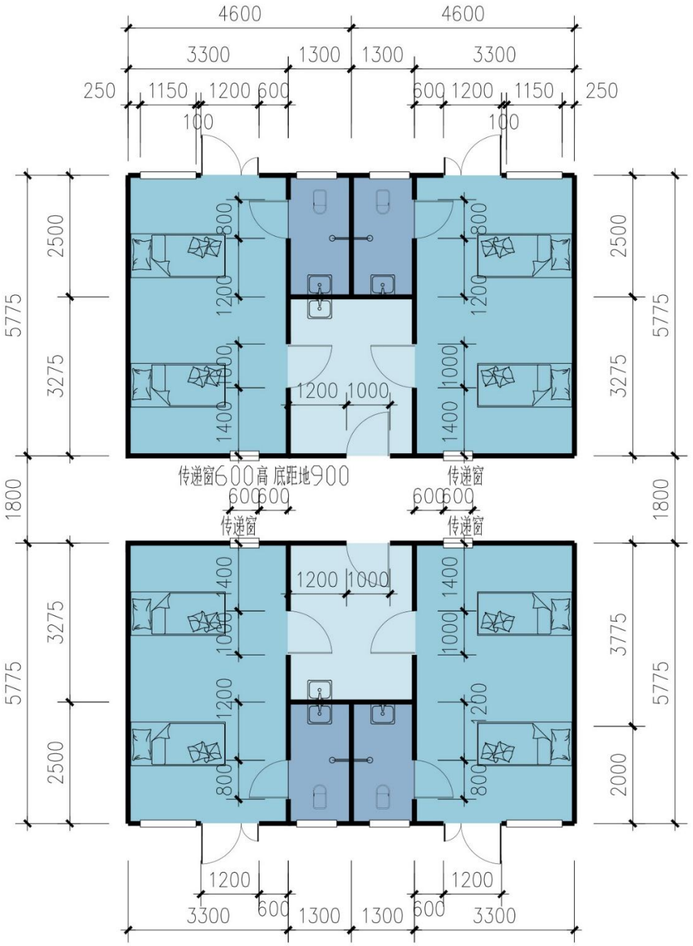
4） Negative air flow is provided within the whole complex. Indoor air is moving from clean to contaminated area all the time. Air exchange rate from 6~12 time or more per hour are suggested.

4.Typical plan

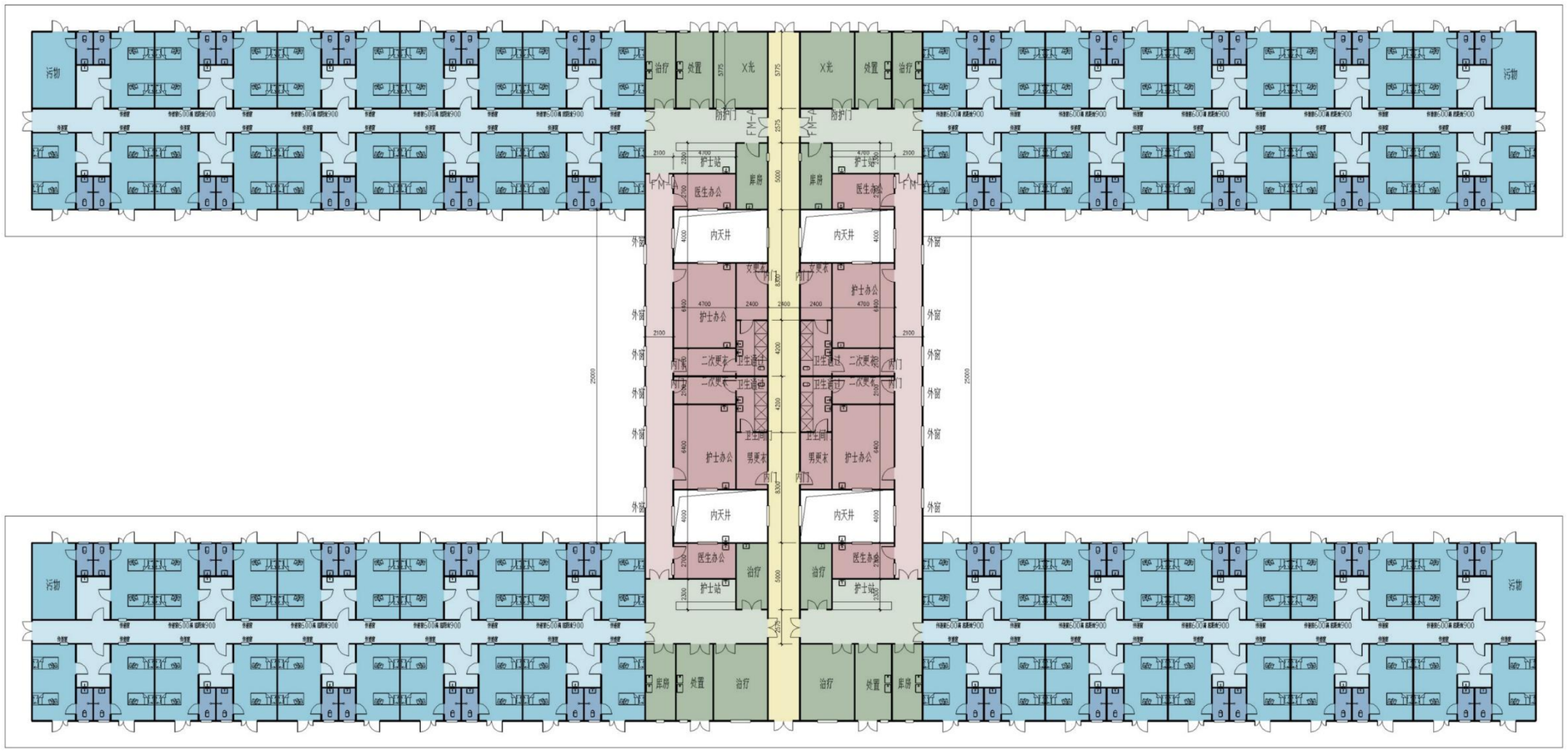
Standard Nursing ward





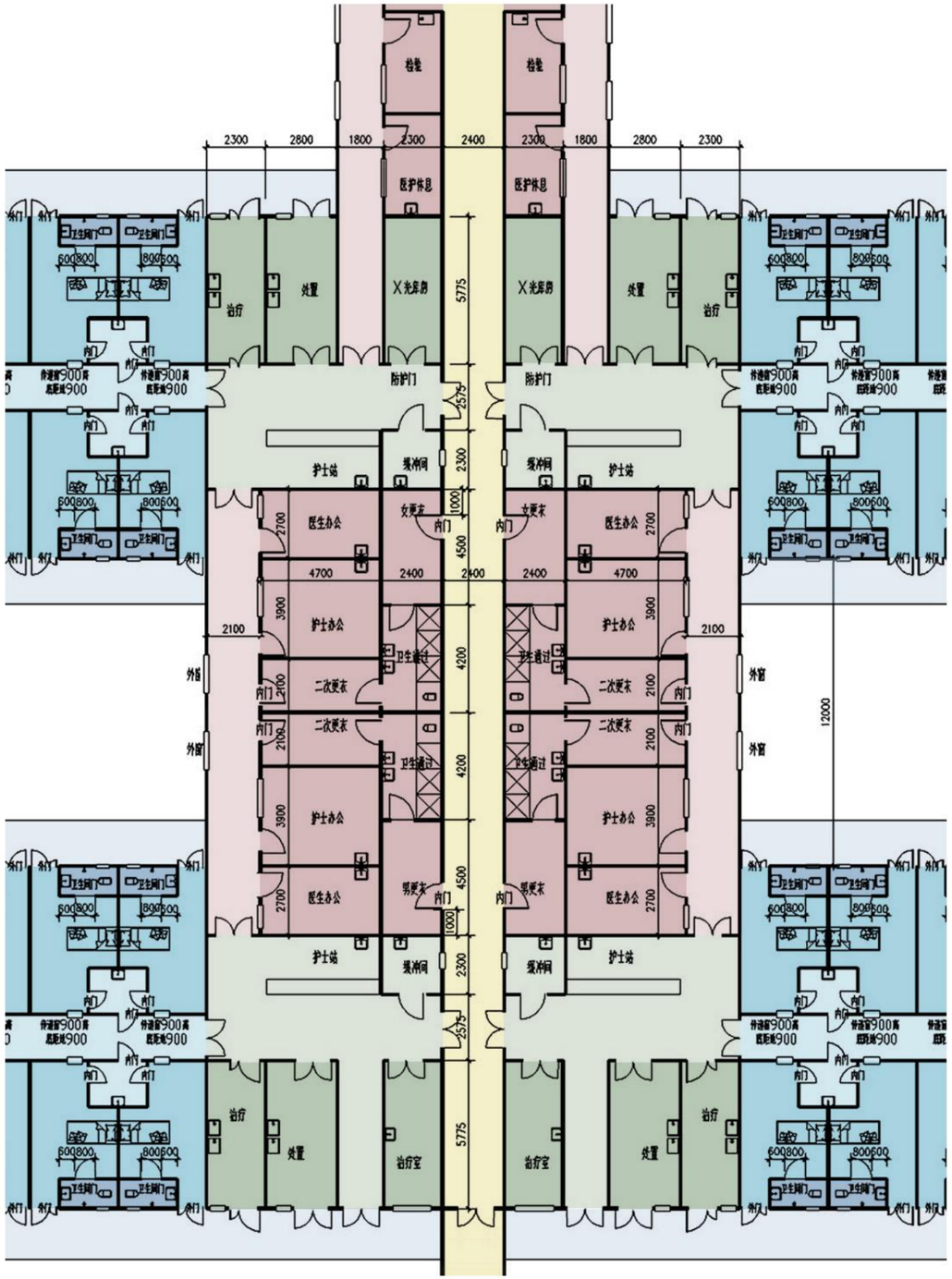


Typical nursing unit



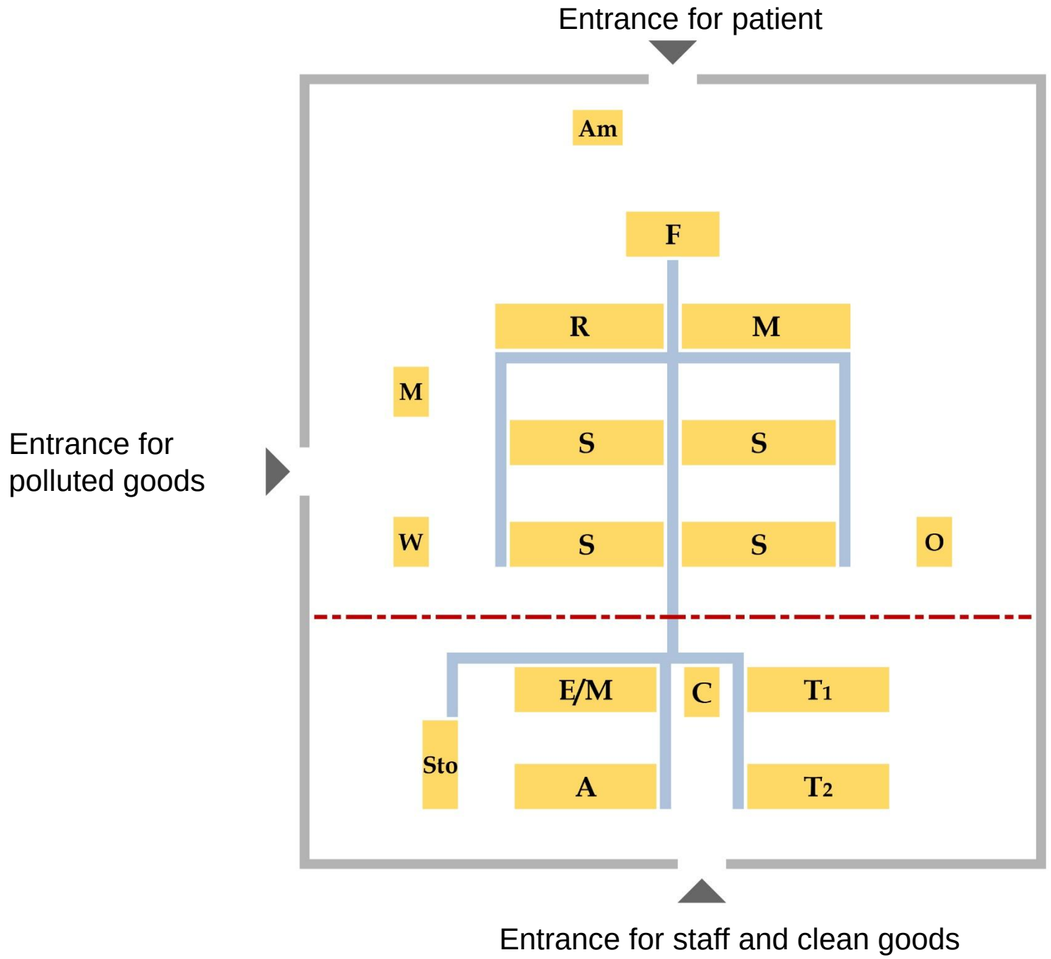
平面布置图

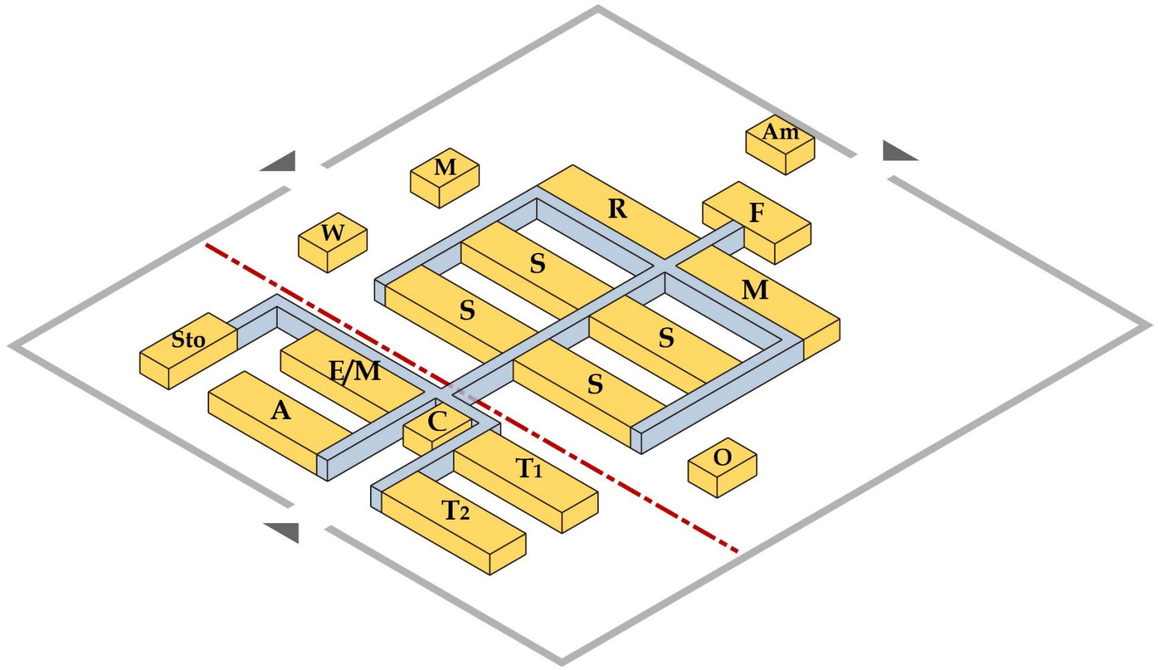
Central spine zone



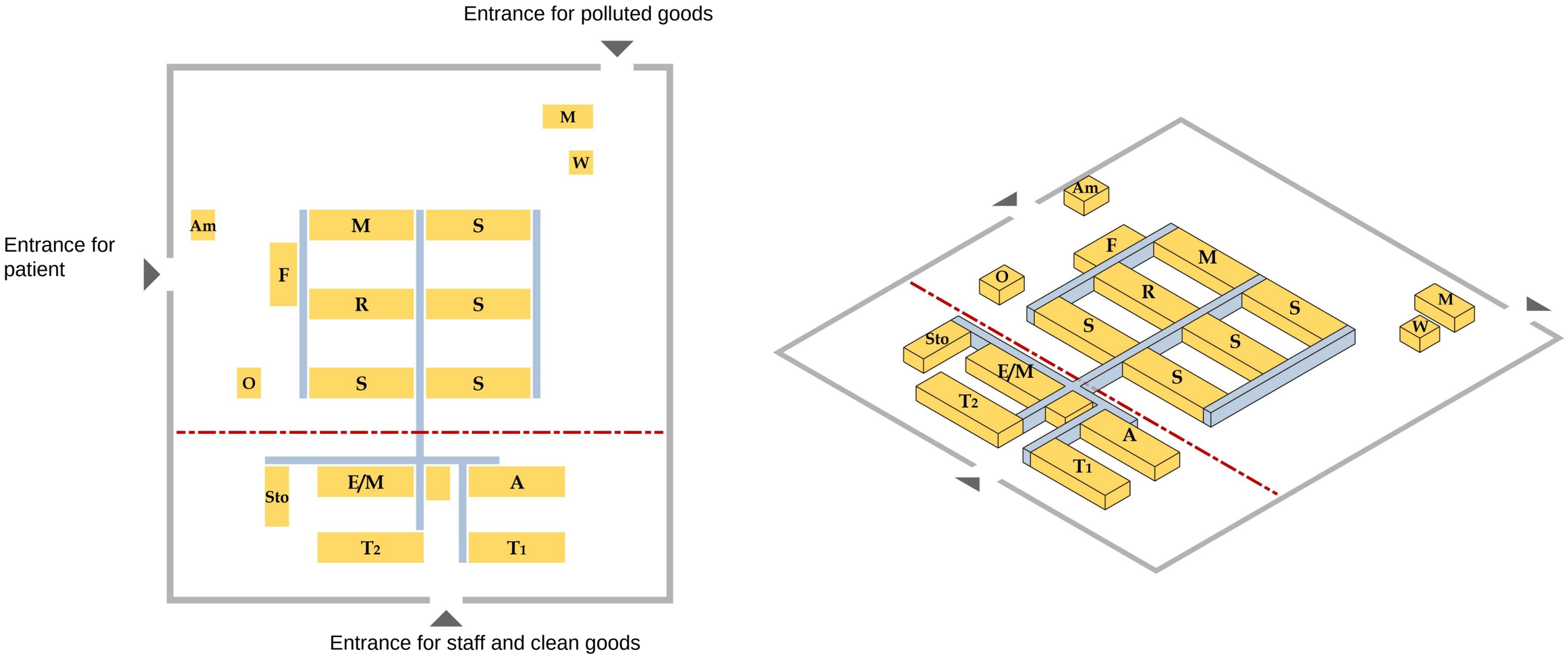
5.Example of General plan

Prototype A

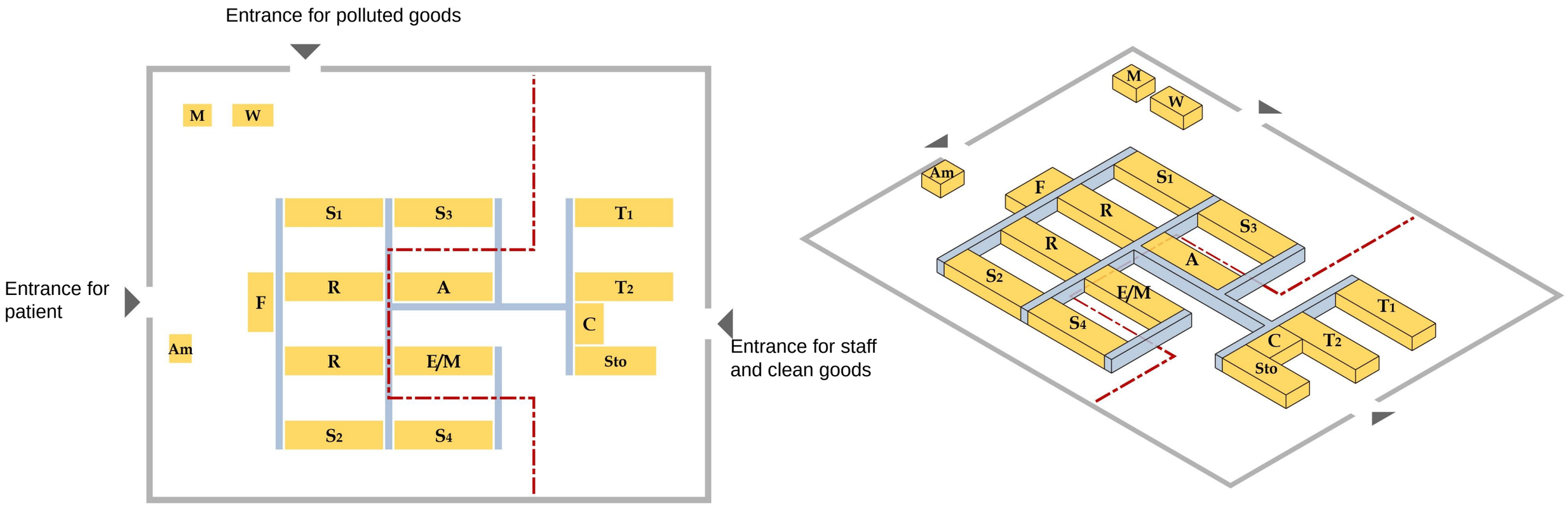




Prototype B


Entrance for polluted goods
Entrance for patient
Entrance for staff and clean goods
M
W
Am
M
S
F
R
S
O
S
S
Sto
E/M
A
T2
T1
Am
F
M
O
R
S
S
S
S
S
M
W
Sto
E/M
T2
A
T1

Prototype C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S4

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