

IAEA  
Greenhouse  
Seibersdorf,  
##### Austria

Room No.	Climate Zone	Crop/activity	User	Greenhouse Function	extra remarks	preferred summer day temperature (°C)	preferred summer night temperature (°C)	average humidity (% RH)	Containment	crop placement	crop suspension	roof cladding material	outside wall cladding	partition wall cladding	corridor side wall cladding	roof vents	insect netting	Netting size	door numbers
						[°C]	[°C]	[%rH]				nr	nr	nr	[Y/N]	[Y/N]	[Y/N]		
						Climate			Room requirements			Greenhouse							
GH-0-01	GH-0-10	1	SWMCNL	soil testing		20-30, depending on the crop	18-20	70-80	insect netting	benches	N	Single glas	single glass	glass	glass	YES	YES	white flies	1
GH-0-09		1	PBGL Module 7 (pathology)	Pathology	Biosafety level 1	20-30, depending on the crop	18-20	70-80	Biosafety level	benches	N	laminated glas or polycarbonate, underpressure	laminated glass or polycarbonate	glass	glass	Y	Y	white flies	1
GH-0-02		1	PBGL Module 5 (no flooring)	No Flooring	this module is for planting directly in soil (e.g. banana) and for placing potted plants directly on the soil, should maximize soil area	25-30	18-20	70-80	insect netting	soil	?	Single glas	single glass	glass	glass	Y	Y	white flies	1
GH-0-11		1	PBGL Module 4 (temperate)	Temperate		20-25	18-20	for temperate crops	insect netting	benches	N	Single glas	single glass	glass	glass	Y	Y	white flies	1
GH-0-07		1	Autoclave		houses two autoclaves with different functionality; 1 for biosafety materials (SWMCNL/FEPL) - not radioactive; 1 for biosafety materials (PBGL); should comply with biosafety/biohazard regulations	25	18-20	50	insect netting		N	Single glas	single glass	glass	glass	YES	YES	white flies	1
GH-0-06		2	AirLock for Radioisotope Greenhouse			25	18-20	50	closed room, negative pressure			Laminated glas or polycarbonate	single glass	glass	glass	YES plus ventilation through hepa filtering	YES	white flies	2
GH-0-08		1	Hot Greenhouse		Radioactivity should be contained in case of hail damage	20-30, depending on the crop	18-20	70-80	closed room, negative pressure	benches	N	Laminated glas or polycarbonate	single glass	glass	glass	YES plus ventilation through hepa filtering	YES	white flies	2
GH-0-05		1	FEP module			20-30, depending on the crop	18-20	70-80	insect netting	benches	N	Single glas	single glass	glass	glass	YES	YES	white flies	1
GH-0-03		1	PBGL Module 3 (dry tropical)	Dry Tropical		20-30	18-20	50-80	insect netting	benches	N	Single glas	single glass	glass	glass	Y	Y	white flies	1
GH-0-04		1	PBGL Module 2 (humid tropical)	Humid Tropical		20-30	18-20	70-80	insect netting	benches	N	Single glas	single glass	glass	glass	Y	Y	white flies	1
GH-0-12		2	Corridor			25	18-20	50	insect netting			Single glas		glass	glass	YES	YES	white flies	
GH-0-13		2	Visitors			25	18-20	50	insect netting			No glass		No glass	No glass	YES	YES	white flies	4

Pallet jack / fork lift entrance					door type: Sliding /hinged					door automation					Door width (mm)		Door height (m)		inside hor. sun-screen					inside hor.screen-blackout type					outside wall screen					partition wall screen					Corridor wall screen					mechanical ventilation					HP fog system					mechanical cooling daytime					concrete floor					Floor finish					fixed benches					closed bottoms					max plant height					crop suspension					drip irrigation					ebb/flood irrigation					overhead irrigation					Hand irrigation valve (city water)					drain connection to sewage system					drain water recirculation					Hand wash basin (future need)					sulphur evaporators					CO2 dosing, flue gas system					grow light level					type of light LED or HPS					lights, hours per day					mounting height					Fluorescent lights (TL)					Plug socket 230 V					Plug socket 400 V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
[Y/N]	[S/H]	[Y/N]	[m]	[m]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[Y/N]	[

IAEA  
Greenhouse  
Seibersdorf,  
##### Austria

Room No	Climate Zone	Crop/activity	User	Greenhouse Function	extra remarks	min allowed temp °C (-10 °C outside temp)	max allowed temp. °C (35 °C outside temp)	average humidity (% RH)	door numbers	type of door	extra requirement to the door	Door width (mm)	Door height (m)	
						[°C]	[%rH]				[m]	[m]	[m]	
						Climate		Headhouse						
GH-0-19	3		Ovens /threshing	for drying soil and plant samples; for seed threshing		18	25	50		2	See plan prepared by Pascal	No height difference on floor to go in with fork lift (here the fork lift is the driven one, larger	3,8	3,5
GH-0-16	5		Pest Regulation	this room is for storing and preparing solutions and related small equipment for control of plant diseases and pests	requirements: ventilared room and biosafety cabinet for storing pesticides and small equipment with direct	18	25	50			See plan prepared by Pascal		1,9	2,5
GH-0-20			Pot storage, wash and filling room	This room is for filling pots and transplanting, storing pots and trays of different sizes and washing pots, trays, etc	requirements: shelving for storing pots, trays, hydroponics, etc ; washing area with sink; work bench/table for pot	18	25	50			See plan prepared by Pascal	No height difference on floor to go in with fork lift (here the fork lift is the	3,8	3,5
GH-0-15	4		control room			18	25	50			See plan prepared by Pascal		1,9	2,5
GH-0-18	5		Headhouse	open area storing soil, pallets (e.g. sand and peat bags), and for soil mixing with min. 2 mixers and 3 moveable soil containers (ca 70 sqm) and movement of tractor or truck		18	25	50			See plan prepared by Pascal	No height difference on floor to go in with fork lift (here the fork lift is the driven one, larger	3,8	3,5
			Headhouse / Soil Storage space	this space with low separations includes 4 storage areas for soils-substrate, and 2 areas for soil mixing and pallets for sand		10	25	50			See plan prepared by Pascal	No height difference on floor to go in with fork lift (here the fork lift is the	3,8	3,5
			Headhouse/ tractor movement space			10	25	50			See plan prepared by Pascal	No height difference on floor to go in with fork lift	3,8	3,5
GH-0-17	5		Grow Chambers			18	25	50		1	See plan prepared by Pascal	No height difference on floor to go in with fork lift (here the fork lift is the driven one, larger	3,8	3,5
GH-0-14	5		Technic			18	25	50			See plan prepared by Pascal	No height difference on floor to go in with fork lift	1,9	2,5

mechanical ventilation, high volume, outside air	mechanical ventilation, winter ventilation	air distribution type	mechanical cooling daytime	fixed benches	movable benches	bench width	bench length	no of benches	Hand irrigation valve (clean water mixture)	drain connection to sewage system	Flurorescent lights (TL)	Plug socket 230 V	miscellaneous infor	Plug socket 400 V	Concrete Floor drains required	Floor Load	Floor Finish
[Y/N]			[Y/N]	[Y/N]	[Y/N]	[m]	[m]	[pc]	[Y/N]	[Y/N]		[Y/N]			[Y/N]	[kN/m2]	
Mech. Ventilation		Growing system/fitout				Irrigation/fer					Electr						
YES	YES (to remove the heat of the ovens)	open blowout	YES	NO	YES	1	2	1	YES	YES	YES	10	NO	4	YES		NO
YES	YES (TO REMOVE THE PESTICIDE VAPOURS)	open blowout	YES	CABINET FOR PESTICIDES	YES	1	1	1	YES	YES	YES	4	NO	0	YES		NO
YES	NO	open blowout	YES	YES WITH INDUSTRIAL SINK TO	YES FOR POTTING AND				YES	YES	YES	10	LAN + WIRELESS	1			NO
YES	NO	open blowout	YES	NO	YES	1	2	1	YES	YES	YES	?	LAN + WIRELESS	0?	YES		NO
YES	NO	open blowout	YES	NO	YES FOR POTTING AND WASHING	1	2	6	YES	YES	YES	?	LAN + WIRELESS	4	YES		NO
YES	NO	open blowout	YES	NO					YES	YES	YES	6	NO	2		heavy load of soils per unit, 2-3 tons	NO
YES	NO	open blowout	YES	NO	NO				YES	YES	YES	10	NO	1		tractor moving	NO
YES	YES with specific direct escapes from the GCs to take out the	open blowout	YES	NO	YES	1	2	2	YES	YES	YES	20	LAN + WIRELESS	8	YES		NO
YES	NO	open blowout	YES	NO	YES			1	YES	YES	YES	?	LAN + WIRELESS	?	YES		NO