

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that CITY OF PORTLAND

Located At 432 STEVENS Ave

Job ID: 2011-03-611-ALTCOMM

CBL: 175 - - B - 002 - 001 - - - -

has permission to Construct 8.5' x 12.5' Greenhouse

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

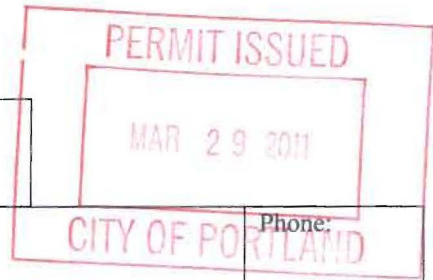
Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY.
PENALTY FOR REMOVING THIS CAR**

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716



| | | | |
|--|--|---|--|
| Job No: 2011-03-611-ALTCOMM | Date Applied: 3/11/2011 | CBL: 175 - - B - 002 - 001 - - - - - | |
| Location of Construction: 432 STEVENS AVE | Owner Name: OF PORTLAND CITY Longfellow Elementary School | Owner Address: 389 CONGRESS ST PORTLAND, ME - MAINE 04101 | Phone: |
| Business Name: | Contractor Name: | Contractor Address: | Phone: |
| Lessee/Buyer's Name: | Phone: | Permit Type: BLDG - Building | Zone: R-5 |
| Past Use: Longfellow Elementary School | Proposed Use: Same: Longfellow Elementary School - To add a 8.5 x 12.6' exterior greenhouse | Cost of Work: 3,000.00 | CEO District: |
| | | Fire Dept: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A | Inspection: Use Group: Type: <u>SB</u> |
| | | Signature: <u>CAPT. R. Sauter</u> | Signature: <u>[Signature]</u> |
| Proposed Project Description: 404 stevens Longfellow Elementary- greenhouse | | Pedestrian Activities District (P.A.D.) | |

| | | | |
|---|---|---|---|
| Permit Taken By: Lannie | Zoning Approval | | |
| <p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p> | Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input checked="" type="checkbox"/> Site Plan <i>exemption #2011-201</i> <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <u>3/22/11</u> | Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: <u>no cond. use appeal required</u> | Historic Preservation <input checked="" type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <u>[Signature]</u> |
| | CERTIFICATION | | |

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

| | | | |
|---|---------|------|-------|
| SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE |
| RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | | DATE | PHON |

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
 - **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
 - **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**
1. Setback inspection required.
 2. Final inspection required.

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-03-611-ALTCOMM

Located At: 432 STEVENS

CBL: 175 - - B - 002 - 001 - - - -

Conditions of Approval:

Building

1. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm HVAC systems, heating appliances, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
2. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.

Job Summary Report
Job ID: 2011-03-611-ALTCOMM

Report generated on Mar 22, 2011 9:25:09 AM

Page 1

| | | | | | |
|----------------------------------|-----------------------|------------------------------|-----------------------------------|-----------------------|-----------------------|
| Job Type: | Adds/Alter Commercial | Job Description: | 404 Stevens Longfellow Elementary | Job Year: | 2011 |
| Building Job Status Code: | Initiate Plan Review | Pin Value: | 899 | Tenant Name: | Longfellow Elementary |
| Job Application Date: | | Public Building Flag: | Y | Tenant Number: | |
| Estimated Value: | 3,000 | Square Footage: | | | |
| Related Parties: | | OF CITY | | Property Owner | |

Job Charges

| Fee Code Description | Charge Amount | Permit Charge Adjustment | Net Charge Amount | Payment Date | Receipt Number | Payment Amount | Payment Adjustment Amount | Net Payment Amount | Outstanding Balance |
|----------------------|---------------|--------------------------|-------------------|--------------|----------------|----------------|---------------------------|--------------------|---------------------|
|----------------------|---------------|--------------------------|-------------------|--------------|----------------|----------------|---------------------------|--------------------|---------------------|

Location ID: 24376

Location Details

| Alternate Id | Parcel Number | Census Tract | GIS X | GIS Y | GIS Z | GIS Reference | Longitude | Latitude |
|--------------|---------------|--------------|-------|-------|-------|---------------|------------|-----------|
| 927125 | 175 B 002 001 | | M | | | | -70.295716 | 43.672841 |

2011-201

| Location Type | Subdivision Code | Subdivision Sub Code | Related Persons | Address(es) |
|---------------|------------------|----------------------|-----------------|--------------------------|
| 1 | | | | 432 STEVENS AVENUE NORTH |

| Location Use Code | Variance Code | Use Zone Code | Fire Zone Code | Inside Outside Code | District Code | General Location Code | Inspection Area Code | Jurisdiction Code |
|-------------------|---------------|----------------|----------------|---------------------|---------------|-----------------------|----------------------|-------------------|
| GOVERNMENTAL | | NOT APPLICABLE | R-5 | | | | DISTRICT 7 | DEERING-ROSEMONT |

Structure Details

Structure: Loc id 000050504 Alt id 927125

Occupancy Type Code:

| Structure Type Code | Structure Status Type | Square Footage | Estimated Value | Address |
|---|-----------------------|----------------|-----------------|--------------------------|
| Schools and Other Educational Buildings | 6 | 0 | | 432 STEVENS AVENUE NORTH |

| Longitude | Latitude | GIS X | GIS Y | GIS Z | GIS Reference | User Defined Property Value |
|-----------|----------|-------|-------|-------|---------------|-----------------------------|
| 0 | 0 | M | | | | |

Not a Historic

Permit #: 20112011

Permit Data

Linn

in Que

Job Summary Report
Job ID: 2011-03-611-ALTCOMM

Report generated on Mar 22, 2011 9:25:09 AM

| Location Id | Structure Description | Permit Status | Permit Description | Issue Date | Reissue Date | Expiration Date |
|-------------|------------------------|---------------|-------------------------|------------|--------------|-----------------|
| 24376 | Longfellow Elemenatary | Initialized | 8.5' x 12.5' Greenhouse | | | |

| Inspection Details | | | | | | |
|--------------------|-----------------|--------------------------|------------------------|---------------------------|--------------------|-----------------------|
| Inspection Id | Inspection Type | Inspection Result Status | Inspection Status Date | Scheduled Start Timestamp | Result Status Date | Final Inspection Flag |
| | | | | | | |

| Fees Details | | | | | | | | |
|----------------------|---------------|--------------------------|--------------------------|--------------|----------------|----------------|---------------------------|---------------------|
| Fee Code Description | Charge Amount | Permit Charge Adjustment | Permit Charge Adj Remark | Payment Date | Receipt Number | Payment Amount | Payment Adjustment Amount | Payment Adj Comment |
| Job Valuation Fees | \$50.00 | | | | | | | |

Ch. # 1660 \$ 50.00



General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

404 Stevens

| | | |
|--|--|--|
| Location/Address of Construction: <u>Longfellow Elementary School, 432 Stevens Ave 04103</u> | | |
| Total Square Footage of Proposed Structure/Area <u>106.93 sf</u> | Square Footage of Lot <u>102,080 sf (2.34 a)</u> | |
| Tax Assessor's Chart, Block & Lot Chart# Block# Lot# <u>175 B 2</u> <u>175 C 1</u> | Applicant * must be owner, Lessee or Buyer* Name <u>Glen Reynolds/Dawn Carrigan</u> Address <u>Longfellow Elementary</u> <u>432 Stevens Ave</u> City, State & Zip <u>Portland, ME 04103</u> | Telephone: <u>School: 874-8195</u> <u>Cell: 809-9788</u> <u>(Glen)</u> |
| Lessee/DBA (If Applicable) | Owner (if different from Applicant) Name <u>City of Portland</u> Address <u>Glen Reynolds</u> <u>Facilities manager</u> City, State & Zip <u>Dawn Carrigan</u> <u>Principal</u> | Cost Of Work: \$ <u>2,900</u> qHse: \$ <u>2,900 + labor value</u> C of O Fee: \$ <u>N/A?</u> Total Fee: \$ <u>50.00</u> |
| Current legal use (i.e. single family) <u>school / outdoor classroom in courtyard</u> If vacant, what was the previous use? Proposed Specific use: <u>greenhouse</u> Is property part of a subdivision? <u>no</u> If yes, please name Project description: <u>Assemble a pre-fabricated greenhouse (8.5' x 12.5') within existing fenced courtyard. No foundation required (no conc. slab). greenhouse to be anchored in stone trench. No utilities needed at this time.</u> | | |
| Contractor's name: <u>Longfellow Parent Teacher organization</u> Address: <u>432 Stevens Ave.</u> City, State & Zip <u>Portland, ME 04103</u> Telephone: <u>809-9788</u> <u>Glen</u> Who should we contact when the permit is ready: <u>Glen Reynolds/Dawn Carrigan</u> Telephone: <u>874-8195</u> <u>School</u> Mailing address: <u>432 Stevens Ave, Ptd, ME 04103</u> <u>A.Segal: 846-0757</u> | | |

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

RECEIVED

Signature: Glen Reynolds Date: 3-11-11

This is not a permit; you may not commence ANY work until the permit is issue

MAR 11 2011

Dept. of Building Inspection
City of Portland Maine



Certificate of Design Application

N/A
less than
\$50,000

From Designer: _____
 Date: _____
 Job Name: _____
 Address of Construction: _____

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year _____ Use Group Classification (s) _____
 Type of Construction _____
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC _____
 Is the Structure mixed use? _____ If yes, separated or non separated or non separated (section 302.3) _____
 Supervisory alarm System? _____ Geotechnical/Soils report required? (See Section 1802.2) _____

Structural Design Calculations

_____ Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

| Floor Area Use | Loads Shown |
|----------------|-------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Wind loads (1603.1.4, 1609)

_____ Design option utilized (1609.1.1, 1609.6)
 _____ Basic wind speed (1809.3)
 _____ Building category and wind importance factor, I_w ,
 table 1604.5, 1609.5)
 _____ Wind exposure category (1609.4)
 _____ Internal pressure coefficient (ASCE: 7)
 _____ Component and cladding pressures (1609.1.1, 1609.6.2.2)
 _____ Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

_____ Design option utilized (1614.1)
 _____ Seismic use group ("Category")
 _____ Spectral response coefficients, S_D & S_I (1615.1)
 _____ Site class (1615.1.5)

_____ Live load reduction
 _____ Roof *live* loads (1603.1.2, 1607.11)
 _____ Roof snow loads (1603.7.3, 1608)
 _____ Ground snow load, P_g (1608.2)
 _____ If $P_g > 10$ psf, flat-roof snow load P_f
 _____ If $P_g > 10$ psf, snow exposure factor, C_e
 _____ If $P_g > 10$ psf, snow load importance factor, I_s
 _____ Roof thermal factor, C_t (1608.4)
 _____ Sloped roof snowload, P_s (1608.4)
 _____ Seismic design category (1616.3)
 _____ Basic seismic force resisting system (1617.6.2)
 _____ Response modification coefficient, R_d and
 deflection amplification factor C_d (1617.6.2)
 _____ Analysis procedure (1616.6, 1617.5)
 _____ Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

_____ Flood Hazard area (1612.3)
 _____ Elevation of structure

Other loads

_____ Concentrated loads (1607.4)
 _____ Partition loads (1607.5)
 _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7,
 1607.12, 1607.13, 1610, 1611, 2404)



Commercial Interior & Change of Use Permit Application Checklist

All of the following information is required and must be submitted. Checking off each item as you prepare your application package will ensure your package is complete and will help to expedite the permitting process.

One (1) complete set of construction drawings must include:

Note: Construction documents for costs in excess of \$50,000.00 must be prepared by a Design Professional and bear their seal.

- Cross sections w/framing details - *see catalog cut*
- Detail of any new walls or permanent partitions
- Floor plans and elevations - *see catalog cut*
- Window and door schedules - *see catalog cut*
- Complete electrical and plumbing layout. *N/A*
- Mechanical drawings for any specialized equipment such as furnaces, chimneys, gas equipment, HVAC equipment or other types of work that may require special review *N/A*
- Insulation R-factors of walls, ceilings, floors & U-factors of windows as per the IECC 2003 *N/A*
- Proof of ownership is required if it is inconsistent with the assessors records.
- Reduced plans or electronic files in PDF format are required if originals are larger than 11" x 17". *N/A*
- Per State Fire Marshall, all new bathrooms must be ADA compliant. *N/A*

Separate permits are required for internal and external plumbing, HVAC & electrical installations.

For additions less than 500 sq. ft. or that does not affect parking or traffic, a site plan exemption should be filed including:

- The shape and dimension of the lot, footprint of the existing and proposed structure and the distance from the actual property lines.
- Location and dimensions of parking areas and driveways, street spaces and building frontage.
- Dimensional floor plan of existing space and dimensional floor plan of proposed space.

A Minor Site Plan Review is required for any change of use between 5,000 and 10,000 sq. ft. (cumulatively within a 3-year period)

Fire Department requirements.

The following shall be submitted on a separate sheet:

- Name, address and phone number of applicant **and** the project architect.
- Proposed use of structure (NFPA and IBC classification)
- Square footage of proposed structure (total and per story)
- Existing and proposed fire protection of structure. *none*
- Separate plans shall be submitted for
 - a) Suppression system
 - b) Detection System (separate permit is required)
- A separate Life Safety Plan must include:
 - a) Fire resistance ratings of all means of egress
 - b) Travel distance from most remote point to exit discharge
 - c) Location of any required fire extinguishers
 - d) Location of emergency lighting
 - e) Location of exit signs
 - f) NFPA 101 code summary
- Elevators shall be sized to fit an 80" x 24" stretcher.

For questions on Fire Department requirements call the Fire Prevention Officer at (207) 874-8405.

Please submit all of the information outlined in this application checklist. If the application is incomplete, the application may be refused.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

Permit Fee: \$30.00 for the first \$1000.00 construction cost, \$10.00 per additional \$1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.



Accessibility Building Code Certificate

N/A The courtyard where the greenhouse will be located is not accessible.

Designer: _____

Address of Project: _____

Nature of Project: _____

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

(SEAL)

Signature: _____

Title: _____

Firm: _____

Address: _____

Phone: _____

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov



Certificate of Design

Date: _____

From: _____

These plans and / or specifications covering construction work on:

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the *2003 International Building Code* and local amendments.

Signature: _____

Title: _____

Firm: _____

Address: _____

Phone: _____

(SEAL)

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

0 item (\$0.00)

- Gift Certificates
- Accessories
- Cold Frame
- Lean-To
- Metal Frame
- Wood Frame
- Plastic Frame
- Composters



[Send to a Friend!](#)

Product Description

Our cleverly engineered Rion Greenhouse snaps together, requiring no tools. The barn style design provides plenty of headroom and dual roof vent help to circulate air throughout the greenhouse. Double walled polycarbonate panels diffuse the light and help insulate the greenhouse.

- Resin frame is maintenance free
- 7 Year Limited Warranty against manufacturer's defects
- Greenhouses are FULLY insulated (aluminum frames are not)
- UV coated polycarbonate glazing - for better sun protection, light diffusion, heat insulation, strength and safety
- Hinged doors - easier to use and more durable than sliding
- Easy push fit assembly - no tools required
- UPS shippable for quick no hassle delivery
- Expandable - add a section now or later
- As strong as aluminum - if not stronger
- Adjustable roof windows
- Detailed instruction manual
- All the hardware that you need - nothing else to buy



Customer Reviews:

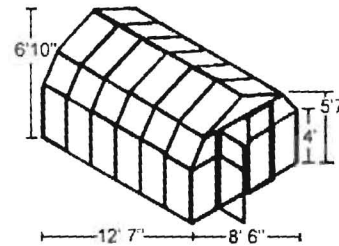
Rion GH46 Greenhouse Kit 8x12

~~Price: \$2,239.00~~

Sale: \$1,679.00

[ADD TO CART >](#)

Due to contractual obligations, we cannot offer our usual "Double the Difference" price guarantee on Rion Greenhouses.



Specifications

| | |
|-------------------|--|
| Shipping | Free in lower 48 states |
| Frame | Resin |
| Covering | 4mm twin wall polycarbonate |
| Vents | 2 roof vents and 1 rear window louver |
| Base | Optional - available below |
| Manuals | Rion Hobby Greenhouse Manual |
| Warranty | 7 Year |
| Dimensions | 8'6" W x 12' L x 6'10" H |

Rion GH46 Greenhouse Base - ships free with greenhouse

Price: \$432.00 **Sale: \$324.00** |

[ADD TO CART >](#)

Rion 4 Foot Double Extension for GH4, GH6, and GH8 Greenhouse Kits

Price: \$499.00 **Sale: \$399.99** |

[ADD TO CART >](#)

- Under \$1000
- \$1000-\$2000
- Over \$2000
- Specials

- Juliana
- Cross Country
- EcoGrow
- EasyGrow
- Rion
- Sunshine
- PolyTex
- Riga
- Halls
- SunGlo
- FlowerHouse
- National
- Guarden
- Atlas
- InstaGrow
- Gronomics





Administrative Authorization Application

Portland, Maine
 Planning and Urban Development Department, Planning Division

PROJECT NAME: Longfellow Elementary School Greenhouse
 PROJECT ADDRESS: 432 Stevens Ave, 04103 CHART/BLOCK/LOT: 175/B/2
175/C/1
 APPLICATION FEE: \$50 (\$50.00)

PROJECT DESCRIPTION: (Please Attach Sketch/Plan of the Proposal/Development)

(Assemble)
 Construct a pre-fabricated greenhouse (8.5'x12.5') within existing fenced courtly
 (Poet's Hideaway Learning garden) No foundation required, greenhouse to be
 anchored in stone trench. No utilities require

CONTACT INFORMATION:

OWNER/APPLICANT

(principal)

Name: Glen Reynolds (facilities manager)
 Address: Longfellow Elementary
432 Stevens Ave 04103
 Work #: * 874-8195
 Cell #: 809-9788
 Fax #: _____
 Home #: _____
 E-mail: GRR@portlandmaine.gov

Dawn → School
 Work #:

Glen → Cell #:

CONSULTANT/AGENT (Rep of PTO/garden committee)

Name: Amy Segal
 Address: 15 Alba St
Portland, ME 04103
 Work #: 207-846-0757
 Cell #: _____
 Fax #: _____
 Home #: 207-756-7598
 E-mail: segal@tjda.net

Criteria for an Administrative Authorizations:
 (see section 14-523(4) on pg .2 of this appl.)

Applicant's Assessment Planning Division
 Y(yes), N(no), N/A

- | | | | |
|---|---|------------------------|----------------------------|
| a) Is the proposal within existing structures? | <u>w/in ex. courtlyd</u> | <u>Y - not in bldg</u> | <u>No - within courtly</u> |
| b) Are there any new buildings, additions, or demolitions? | | <u>Y</u> | <u>yes</u> |
| c) Is the footprint increase less than 500 sq. ft.? | <u>(107 sq)</u> | <u>Y</u> | <u>yes</u> |
| d) Are there any new curb cuts, driveways or parking areas? | | <u>N</u> | <u>No</u> |
| e) Are the curbs and sidewalks in sound condition? | | <u>N/A</u> | <u>n/a</u> |
| f) Do the curbs and sidewalks comply with ADA? | | <u>N/A</u> | <u>n/a</u> |
| g) Is there any additional parking? | | <u>N</u> | <u>No</u> |
| h) Is there an increase in traffic? | | <u>N</u> | <u>No</u> |
| i) Are there any known stormwater problems? | | <u>N</u> | <u>No</u> |
| j) Does sufficient property screening exist? | | <u>N/A</u> | <u>there is a fence</u> |
| k) Are there adequate utilities? | <u>no utilities needed at this time</u> | <u>Y</u> | <u>n/a</u> |
| l) Are there any zoning violations? | | <u>N</u> | <u>No</u> |
| m) Is an emergency generator located to minimize noise? | | <u>N/A</u> | <u>n/a</u> |
| n) Are there any noise, vibration, glare, fumes or other impacts? | | <u>N</u> | <u>No</u> |

RECEIVED

MAR 24 2011

Dept. of Building Inspections
 City of Portland Maine

| | |
|---|----------------------|
| Signature of Applicant: <u><i>Glen Reynolds</i></u> | Date: <u>3-11-11</u> |
|---|----------------------|

Planning Division Use Only

Authorization Granted

Partial Exemption

Exemption Denied

SW [Signature]

Standard Condition of Approval: The applicant shall obtain all required City Permits, including building permits from the Inspection Division (Room 315, City Hall (874-8703)) prior to the start of any construction.

IMPORTANT NOTICE TO APPLICANT: The granting of an Administrative Authorization to exempt a development from site plan review does not exempt this proposal from other approvals or permits, nor is it an authorization for construction. You should first check with the Building Inspections Office, Room 315, City Hall (207)874-8703, to determine what other City permits, such as a building permit, will be required.

**PROVISION OF PORTLAND CITY CODE
14-523 (SITE PLAN ORDINANCE)
RE: Administrative Authorization**

Sec. 14-523 (b). Applicability

No person shall undertake any development identified in Section 14-523 without obtaining a site plan improvement permit under this article. (c) Administrative Authorization. Administrative Authorization means the Planning Authority may grant administrative authorization to exempt a development proposal from complete or partial site plan review that meets the standards below, as demonstrated by the applicant.

1. The proposed development will be located within existing structures, and there will be no new buildings, demolitions, or building additions other than those permitted by subsection b of this section;
2. Any building addition shall have a new building footprint expansion of less than five hundred (500) square feet;
3. The proposed site plan does not add any new curb cuts, driveways, or parking areas; the existing site has no more than one (1) curb cut and will not disrupt the circulation flows and parking on-site; and there will be no drive-through services provided;
4. The curbs and sidewalks adjacent to the lot are complete and in sound condition, as determined by the public works authority, with granite curb with at least four (4) inch reveal, and sidewalks are in good repair with uniform material and level surface and meet accessibility requirements of the Americans with Disabilities Act;
5. The use does not require additional or reduce existing parking, either on or off the site, and the project does not significantly increase traffic generation;
6. There are no known stormwater impacts from the proposed use or any existing deficient conditions of stormwater management on the site;
7. There are no evident deficiencies in existing screening from adjoining properties; and
8. Existing utility connections are adequate to serve the proposed development and there will be no disturbance to or improvements within the public right-of-way.
9. There are no current zoning violations;
10. Any emergency generators are to be located to minimize noise impacts to adjoining properties and documentation that routine testing of the generators occur on weekdays between the hours of 9 a.m. to 5 p.m. Documentation pertaining to the noise impacts of the emergency generator shall be submitted; and
11. There is no anticipated noise, vibration, glare, fumes or other foreseeable impacts associated with the project.

- a. **Filing the Application.** An applicant seeking an administrative authorization under this subsection shall submit an administrative authorization application for review, detailing the site plan with dimensions of proposed improvements and distances from all property lines, and stating that the proposal meets all of the provisions in standards 1-11 of Section 14-423 (b)1. **The application must be accompanied by an application fee of \$50.**
- b. **Review.** Upon receipt of such a complete application, the Planning Authority will process it and render a written decision of approval, approval with conditions or denial, with all associated findings.
- c. **Decision.** If a full administrative authorization is granted, the application shall be approved without further review under this article, and no performance guarantee shall be required. In the event that the Planning Authority determines that standards a and b of Section 14-523 (b) (1) and at least four (4) of the remaining standards have been met, the Planning Authority shall review the site plan according to all applicable review standards of Section 14-526 that are affected by the standards in this subsection that have not been met. If an exemption or partial exemption from site plan review is not granted, the applicant must submit a site plan application that will undergo a full review by the Planning Board or Planning Authority according to the standards of Section 14-526.



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I Rion GH46 Greenhouse Kit



I About Us

Worldwide Innovation



In addition to being the largest distributor of greenhouses in the U.S. - we also develop and manufacture a broad range of greenhouse kits including worldwide favorites like Juliana, Halls and EasyGrow.

Experienced Staff



Our helpful staff have built countless greenhouses and are standing by to answer your questions.

Check out our Greenhouse Growing Blog.

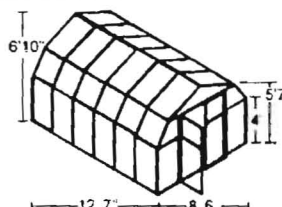


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Click here for the best price on the GH46

Our cleverly engineered Rion Greenhouse snaps together, requiring no tools. The barn style design provides plenty of headroom and dual roof vent help to circulate air throughout the greenhouse. Double walled polycarbonate panels diffuse the light and help insulate the greenhouse.

- Resin frame is maintenance free
- 7 Year Limited Warranty against manufacturer's defects
- Greenhouses are FULLY insulated (aluminum frames are not)
- UV coated polycarbonate glazing - for better sun protection, light diffusion, heat insulation, strength and safety
- Hinged doors - easier to use and more durable than sliding
- Easy push fit assembly - no tools required
- UPS shippable for quick no hassle delivery.
- Expandable - add a section now or later
- As strong as aluminum - if not stronger
- Adjustable roof windows
- Detailed instruction manual
- All the hardware that you need - nothing else to buy



Greenhouse Specifications

Shipping

- Frame
- Covering
- Vents
- Base
- Manuals
- Warranty
- Dimensions

Free in lower 48 states

- Resin
- 4mm twin wall polycarbonate
- 2 roof vents and 1 rear window louver
- None
- Rion Hobby Greenhouse Manual
- 7 Year
- 8'6" W x 12' L x 6'10" H

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I Load Test

Why Choose A Rion Greenhouse?



I About Us

Worldwide Innovation



In addition to being the largest distributor of greenhouses in the U.S. - we also develop and manufacture a broad range of greenhouse kits including worldwide favorites like Juliana, Halls and EasyGrow.



Experienced Staff



Our helpful staff have built countless greenhouses and are standing by to answer your questions.

Check out our Greenhouse Growing Blog.

The Rion greenhouse is framed with hunter green PVC that's UV protected for long life and held together with high impact, press fit resin connectors. It's just as strong as aluminum, and looks even better! **Glazing is 4mm twin wall polycarbonate that can withstand winds of up to 80 mph and support a snow load of 1100 lbs!**

Rion greenhouses are built from lightweight materials that are easy to ship and assemble. Since distribution adds tremendous costs to retail items, Rion's stronger, lighter greenhouses save you money and make assembly a snap, no expensive tools or contractors required! The Rion greenhouse is modular in construction which means you can easily add sections to increase the overall length of your Rion greenhouse at any time.



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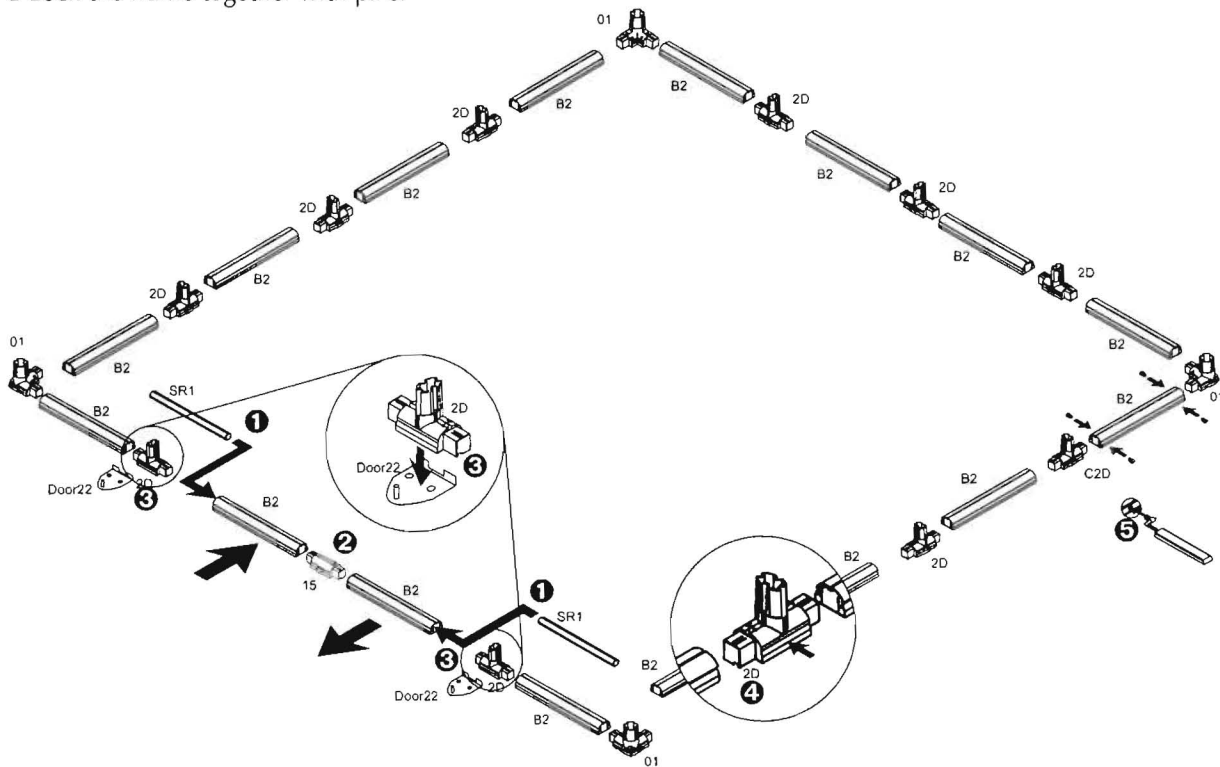


Lay Out the Greenhouse Frame

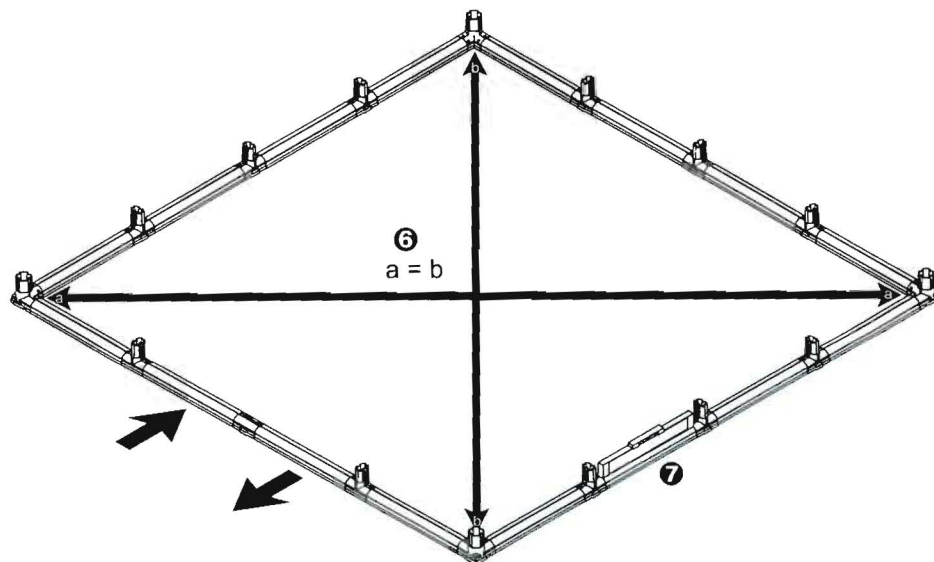
Decide in which direction the door will face and place the parts on the prepared foundation or wood deck.

Note: If you are using a modular base or other foundation option (see page 3) assemble the base on a flat surface (such as a driveway or a garage) and then move it into position when you are done.

- ❶ Slide the SR1 profiles into the two B2 frame profiles that will be used for the doorway.
- ❷ Place the two prepared B2 frame profiles on either side of the 15 connector.
- ❸ Place a 2D connector on both sides.
- ❹ Place the other parts of the frame in place and push them together. Make sure that the channel of the 2D connectors faces outward. Each base connector is stamped with an arrow pointing to the outside direction.
- ❺ Lock the frame together with pins.



- ❻ Make sure that the frame is perfectly rectilinear by measuring the diagonals and verifying that they are the same.
- ❼ Use a spirit level to make sure that the frame is level.



Secure the Frame to the Foundation

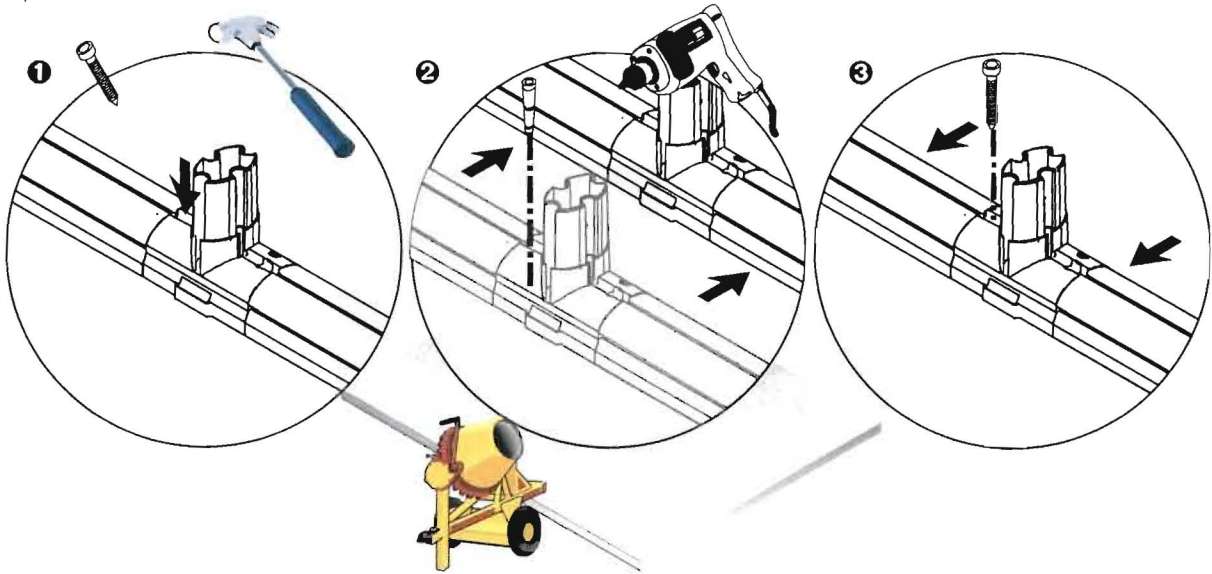
Make sure you have the proper hardware before beginning this step. (See page 3.)

Note: If you are using a modular base and filler you may assemble the greenhouse on a hard surface and move it to its final position when you have finished. Make sure that there are no obstructions between the assembly area and the final position.

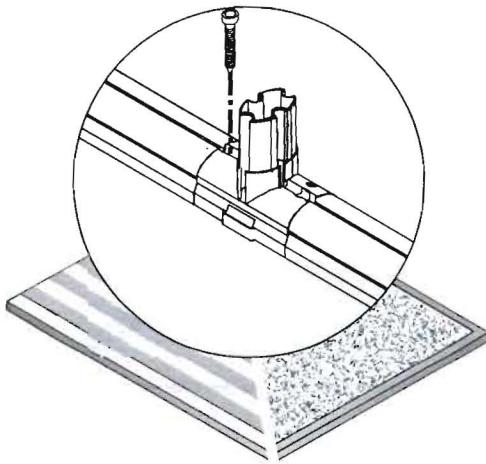
Concrete Foundation

N/A

- 1 Mark the foundation through each connector using a scribe or screw.
- 2 Carefully move the frame and then drill holes using an appropriate masonry bit. Insert concrete anchors or expansion anchors (not supplied) in each hole.
- 3 Move the frame back into place. Make sure that it is still perfectly rectilinear. Secure the screws/anchors in place.



Modular Base, Wood Deck, or Treated Foundation



Insert screws into the frame connector holes and secure them to the base.

Note: If you have purchased the Modular Base all necessary hardware is included.

Assemble the Roof Pediments

❶ Put ST7 couplers on the PN8R and PN8L pediment panel halves as shown. The tops of each coupler are trimmed to match the angle of the panel.

Note: The outside surface of the panels have special UV protection, indicated by the logo and the plastic identification strip. Remove plastic ID strips when as panels are locked in place.

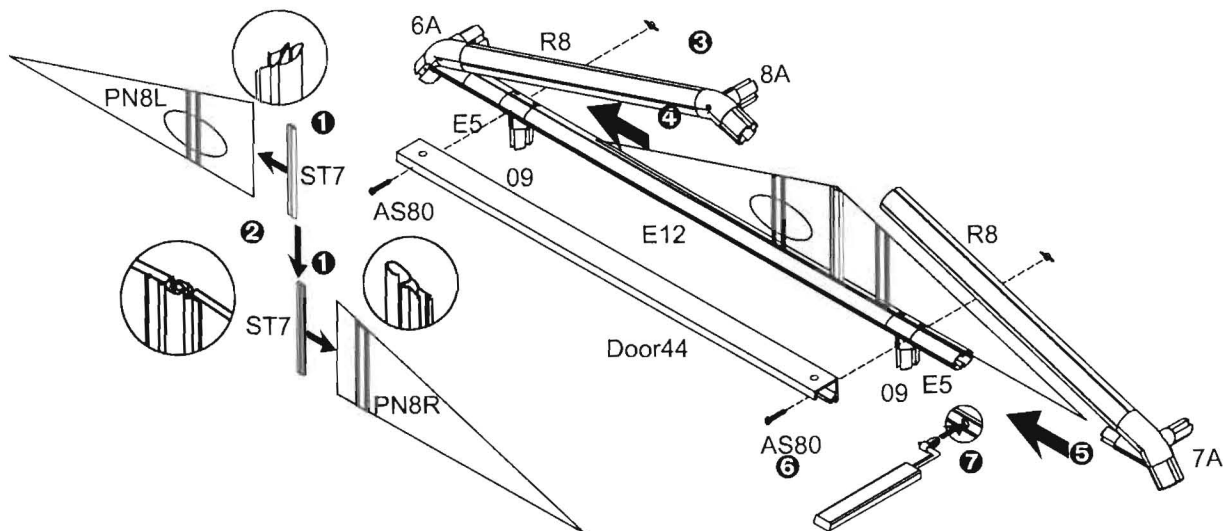
❷ Slide the two pediment panel halves together.

❸ Assemble all parts of the front pediment except for the 7A connector and the R8 profile. Take care that the internal metal strengthening bar in the E12 profile remains in place.

❹ Slide the assembled PN8R/PN8L pediment panel into the open space of the pediment.

❺ Complete the front pediment with the 7A connector and the R8 profile, taking advantage of the flexibility of the profiles.

❻ Lock the pediment in place using pins and remove the ID strips from the panels.



Complete Doorway Pediment

❶ Attach the E4R and R2 profiles to the lower right pediment. The E4R profile has a sticker indicating the up direction.

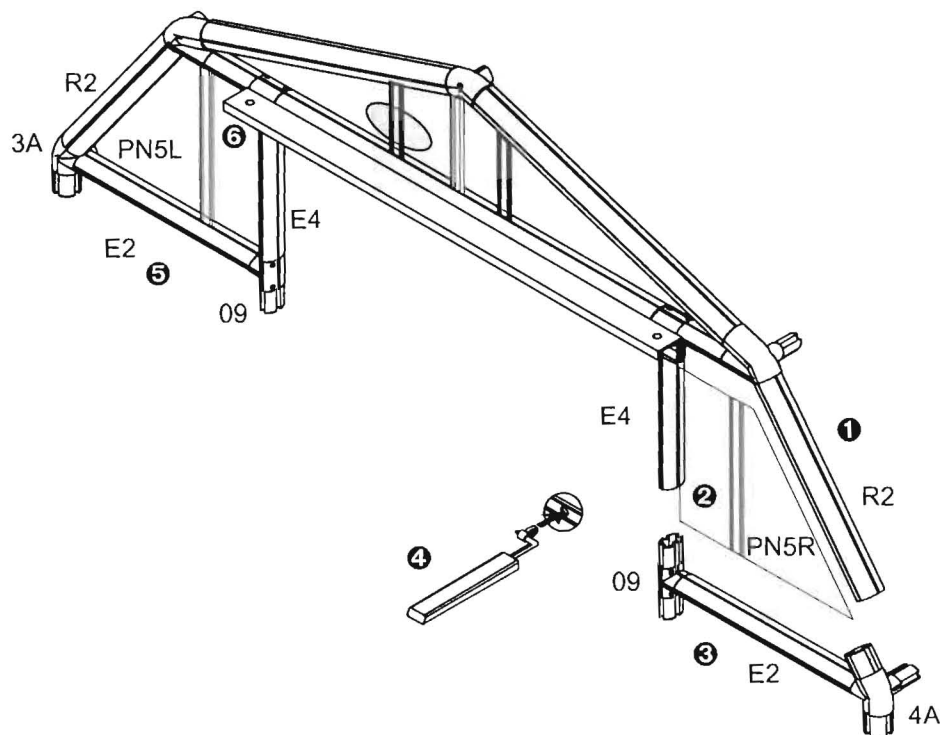
❷ Slide the PN5R panel in place. Make sure that the plastic ID strip faces out.

❸ Connect the 4A and 09 connectors to an E2 profile and put it in place taking advantage of the flexibility of the profiles.

❹ Lock the panel with pins.

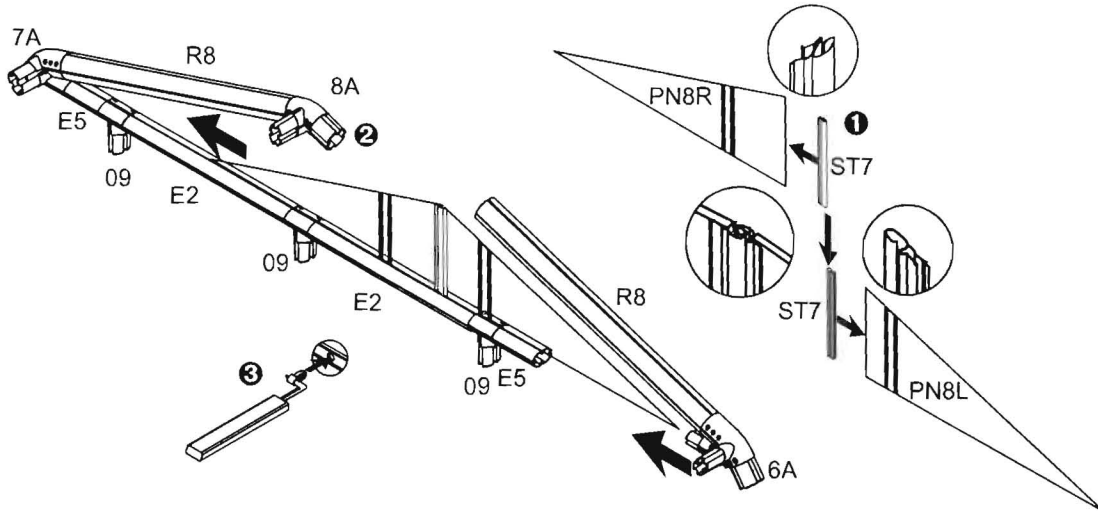
❺ Assemble the lower left pediment in the same way. Note the "UP" sticker on the E4R profile.

❻ Remove the ID strips from the panels.



Back Pediment

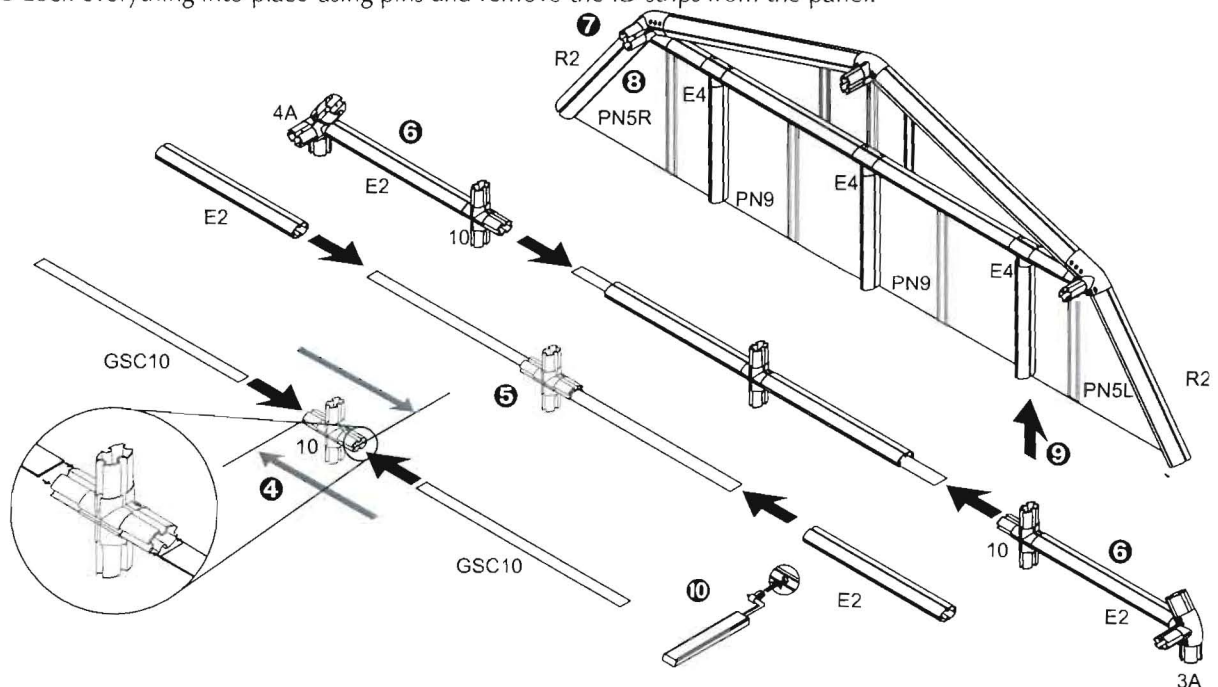
- ❶ Put ST7 couplers on the PN8R and PN8L pediment panel halves with the ID plastic strip facing outside. The tops of each coupler are trimmed to match the angle of the panel. Slide the two pediment panel halves together.
- ❷ Assemble all parts of the back pediment except for the 7A connector and the R8 profile and slide the assembled PN8R/PN8L pediment panel into the open space of the pediment. Complete the back pediment, taking advantage of the flexibility of the profiles.
- ❸ Lock the pediment in place using pins and remove the ID strips from the panels.



- ❹ Slide two GSC10 strengthening bars into both sides of a 10 connector, one in the upper section and the other in the lower section. They will overlap inside the connector and their ends will be flush with the far end.
- ❺ Slide two E2 profiles over the GSC10 strengthening bars. The ends of the strengthening bars will extend beyond the E2 profiles.
- ❻ Complete the back pediment support with the 10 connectors, E2 profiles and 4A and 3A connectors as shown.
- ❼ Put the remaining profiles on the back pediment top.
- ❽ Slide the back pediment panels in as shown. Make sure that the plastic ID strip faces the outside.

Note: If you have purchased one or more optional Louvered Windows insert them instead of the PN9 panels.

- ❾ Put the back pediment support in place, taking advantage of the flexibility of the profiles.
- ❿ Lock everything into place using pins and remove the ID strips from the panel.



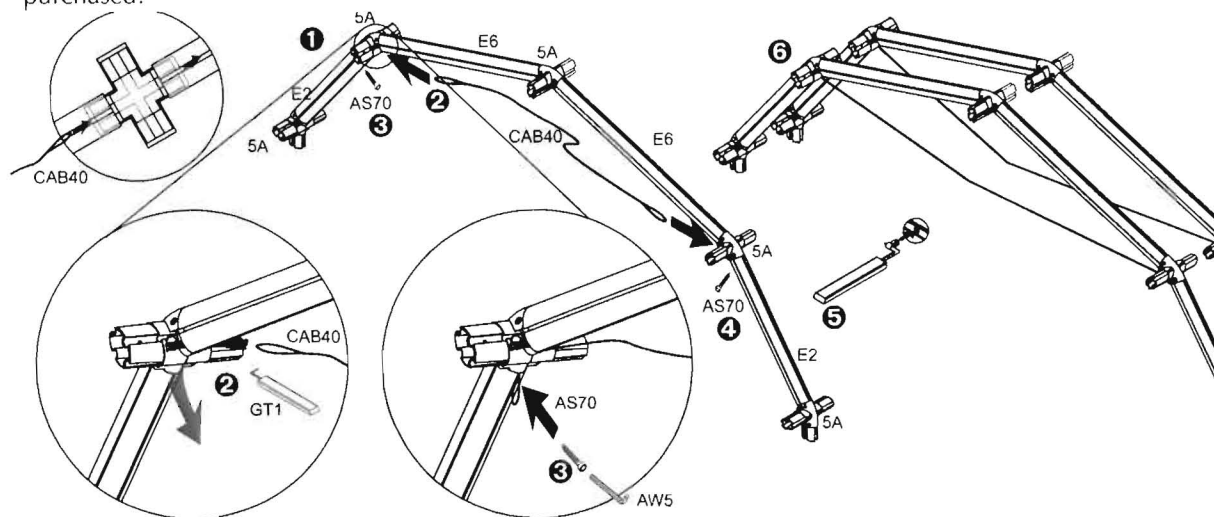
Assemble Roof Framework

Note: Assemble the roof in an area not too far away from the completed base.

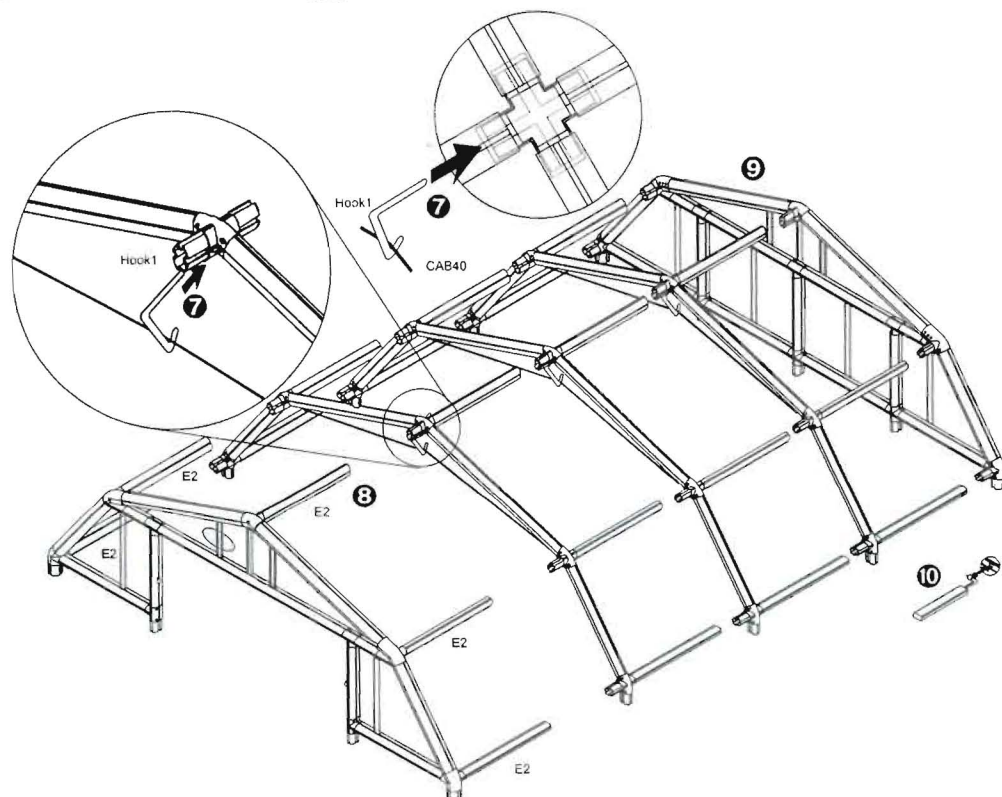
- ❶ First assemble the first arch.
- ❷ Slip one end of the CAB40 cable through the 6 mm (1/4") channel on the underneath side of the 5A connector. You may use the GT1 pin and glazing tool to assist you. **The cable does not go through the central hole of the connector.**
- ❸ Screw an AS70 screw using the AW5 Allen wrench through the CAB40 cable and the pin holes in both sides of the connector.

Note: The end of the screw should not extend beyond the outside channel of the E2 profile so it won't interfere with the placement of the RB1 glazing element (page 13).

- ❹ Repeat the previous two steps for the 5A connector on the other side of the arch.
- ❺ Lock the parts in place using pins.
- ❻ Repeat steps ❶ through ❺ for the rest of the arches according to the number of GH40M modules you have purchased.

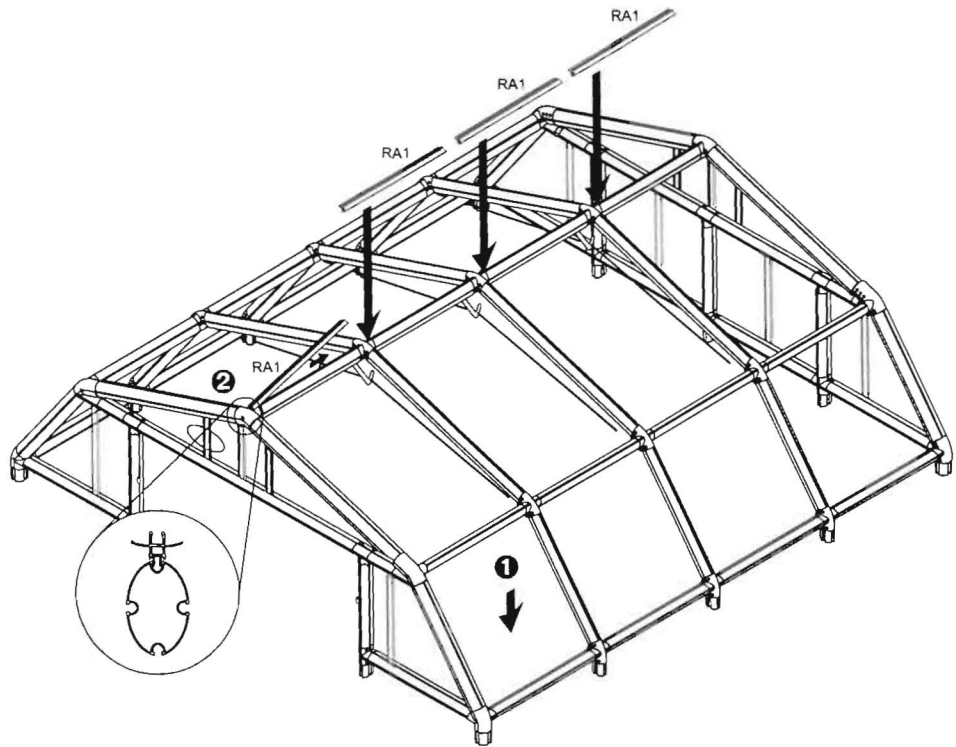


- ❼ Grasp the center of each CAB40 cable with the Hook1 Top Catch and slide it into the top 5A connector as shown.
- ❽ Add E2 profiles to the front pediment and lock the parts in place using pins.
- ❾ Add E2 profiles to the completed ribs according to the number of modules you have purchased and lock them into place with pins.
- ❿ Complete the roof by attaching the back pediment. Lock it into place with pins.

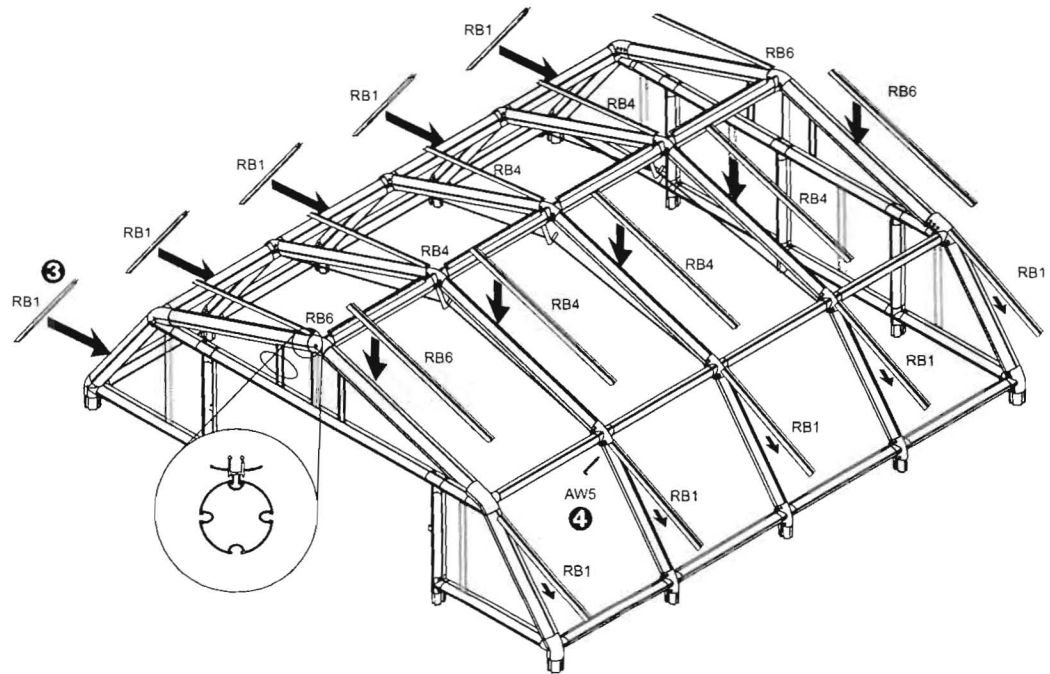


Cover the Greenhouse Roof

- 1 Step in the framework of the lower window to reach the top of the roof conveniently.
- 2 Place RA1 glazing elements on the top of the roof by placing one end in the top channel and pushing it down along the length of the profile.



- 3 Place RB1, RB4, and RB6 glazing elements along the arches where shown. Place one end of the RB elements in the channels of the profiles and slide them down the length of the profile.

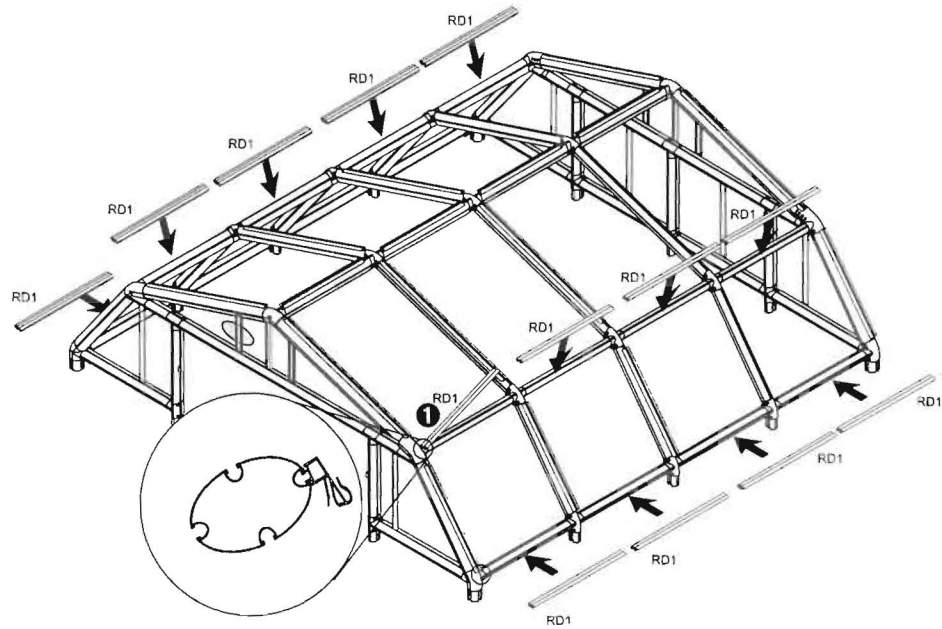


Note: If you have difficulty inserting the top of the RB1 glazing element slightly loosen the AS70 screw holding in the CAB40 cable.

- 4 Tighten the AS70 screws holding the CAB40 cables with the AW5 Allen wrench.

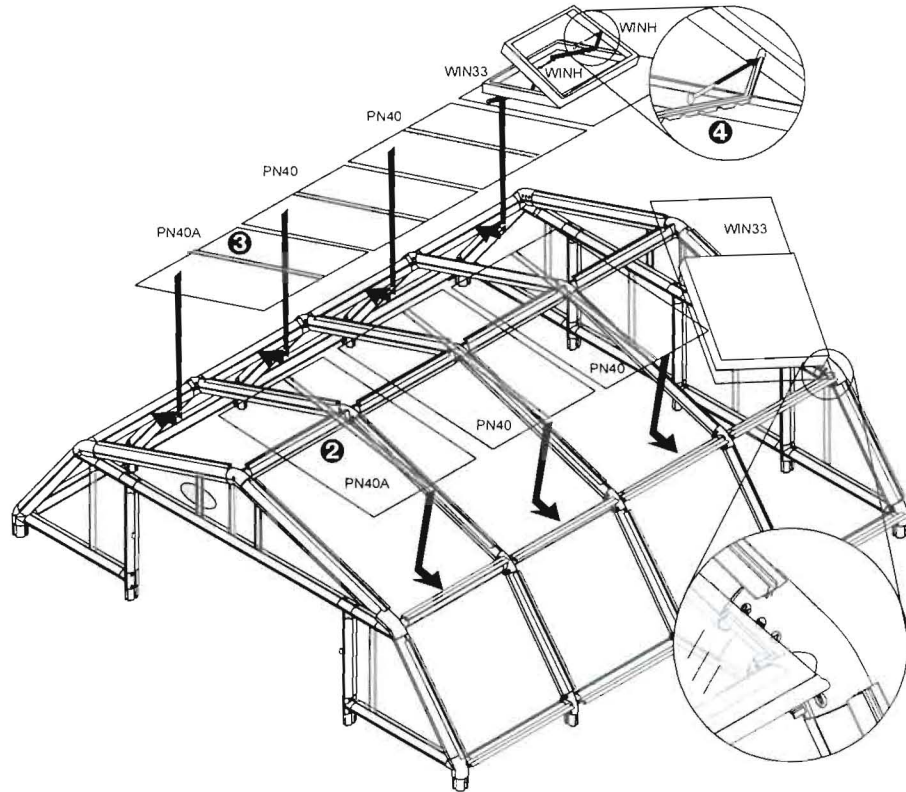
- Place RD1 elements where shown by placing one end in the channel and pushing it down along the length of the profile.

Note: You may find it easier to insert RD elements into profiles by pushing them in from the top while rolling the element downwards.



Note: Before the next step decide where you want to put the WIN33 Roof Vents. We recommend that they be placed in the front or back of your greenhouse.

- Place the PN40 panels and the PN40A side panels in place by sliding one corner into the RD1 glazing element. Continue until they are fully inserted.
- Remove the ID strips from the panels.
- Assemble the two WINH31 handles to each WIN33 Roof Vent using the included pins.
- Insert the Roof Vents by sliding one corner into the RD1 glazing element. Continue until they are fully inserted.

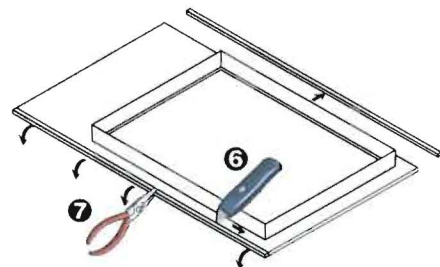


To install a WIN33 Roof Vent in a central position (instead of a PN40 panel) first you must trim the edges as follows:

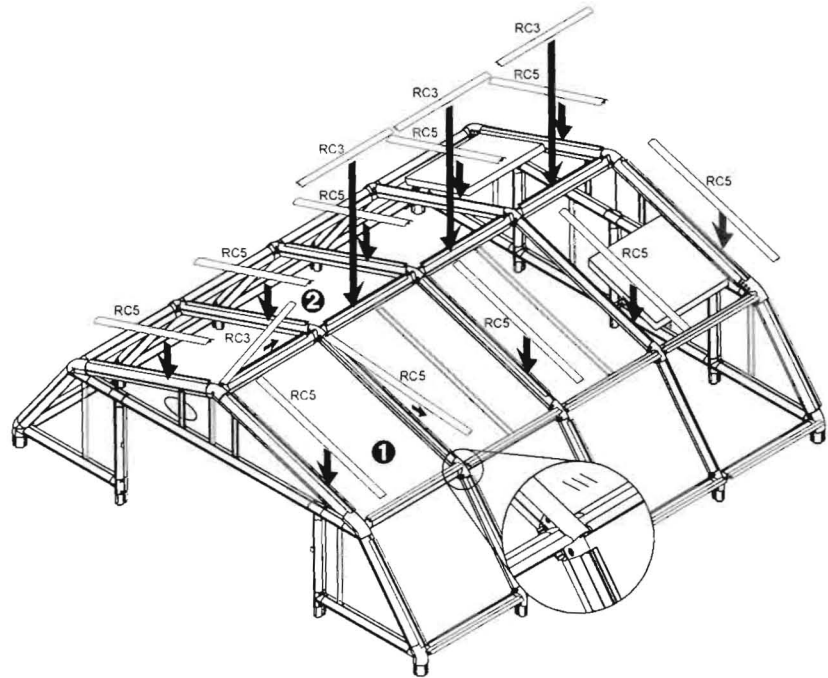
- After assembling a WIN33 window handles trim 6 mm (1/4") from each side with a razor knife or hacksaw.
- Remove the cut portion.

Note: Additional Roof Vents are available as an option.

Caution: Close windows in high winds. Automatic window openers are available as an option.

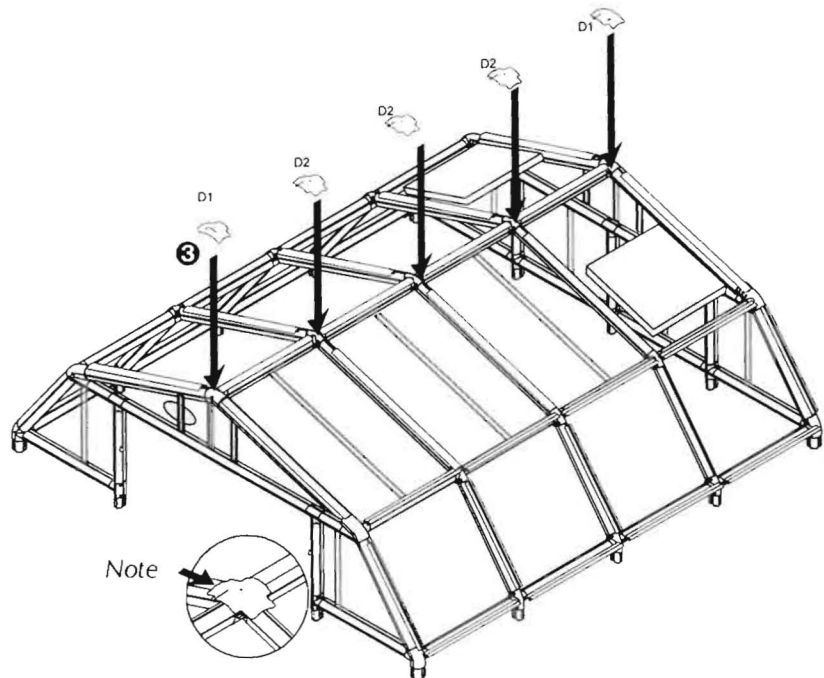


- ❶ Lock the sides of the Roof Vents and the PN40 using RC5 glazing elements. Make sure that the end of the RC glazing elements are in line with the bottom of the RD elements.
- ❷ Finish locking the panels into place by placing RC3 glazing elements across the top of the roof.



- ❸ Snap the roof caps in place on the top rib intersections.

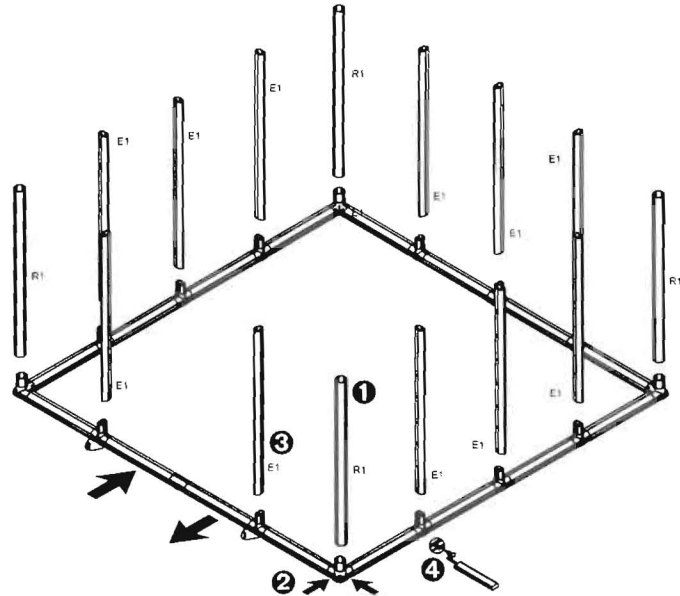
Note: If you need to remove the roof caps push them on one side and then lift.



Raise the Roof

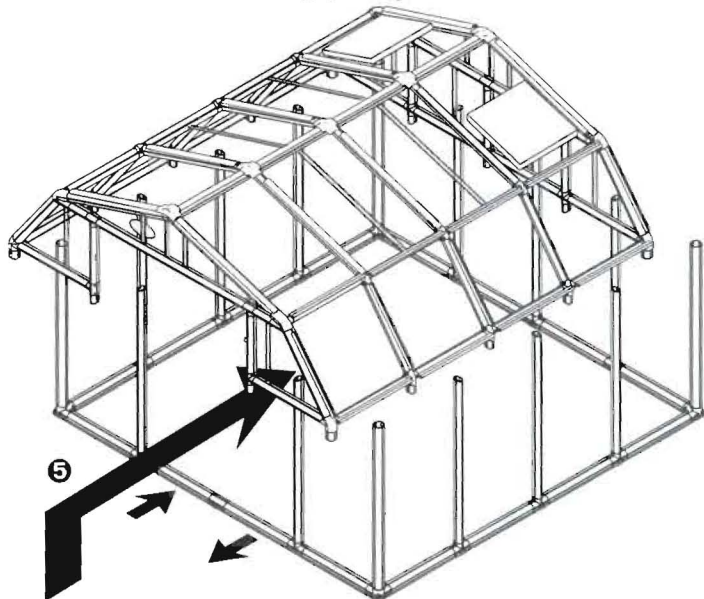
- 1 Put the R1 round profiles in place.
- 2 Insert two pins in each R1 profile to lock them in place. Do not insert pins in the inner (panel) channels. Add the E1 oval profiles until the frame is completed.
- 3 Attach the E1R and E1L profiles to the doorway of the frame. Each of these profiles has a sticker indicating the up direction.
- 4 Put the rest of the E1 profiles in place and lock them secure with pins.

Note: If there is no wind you may install the PN1 panels before putting the roof in place (page 17).



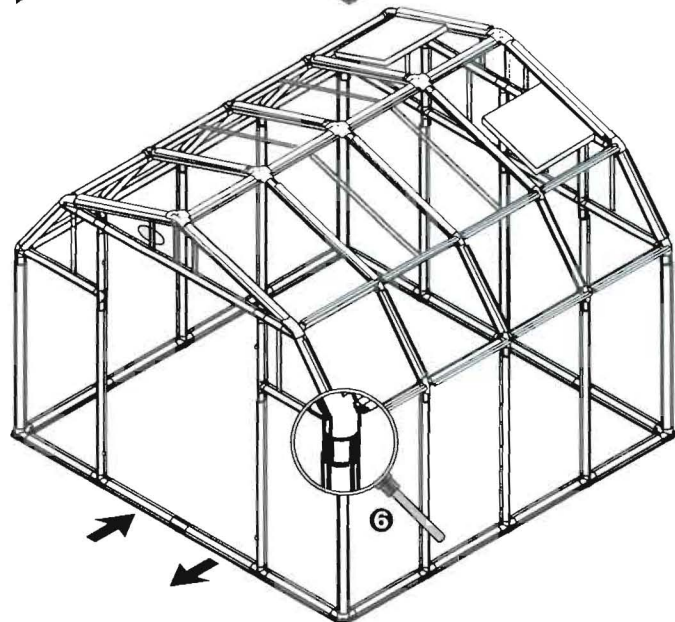
- 5 Make sure that the roof is in the same orientation as the base and door. Lift the roof from both edges and walk through the door towards the back wall.

Note: You will need the help of another person for a short while to lift the roof and put it in place.



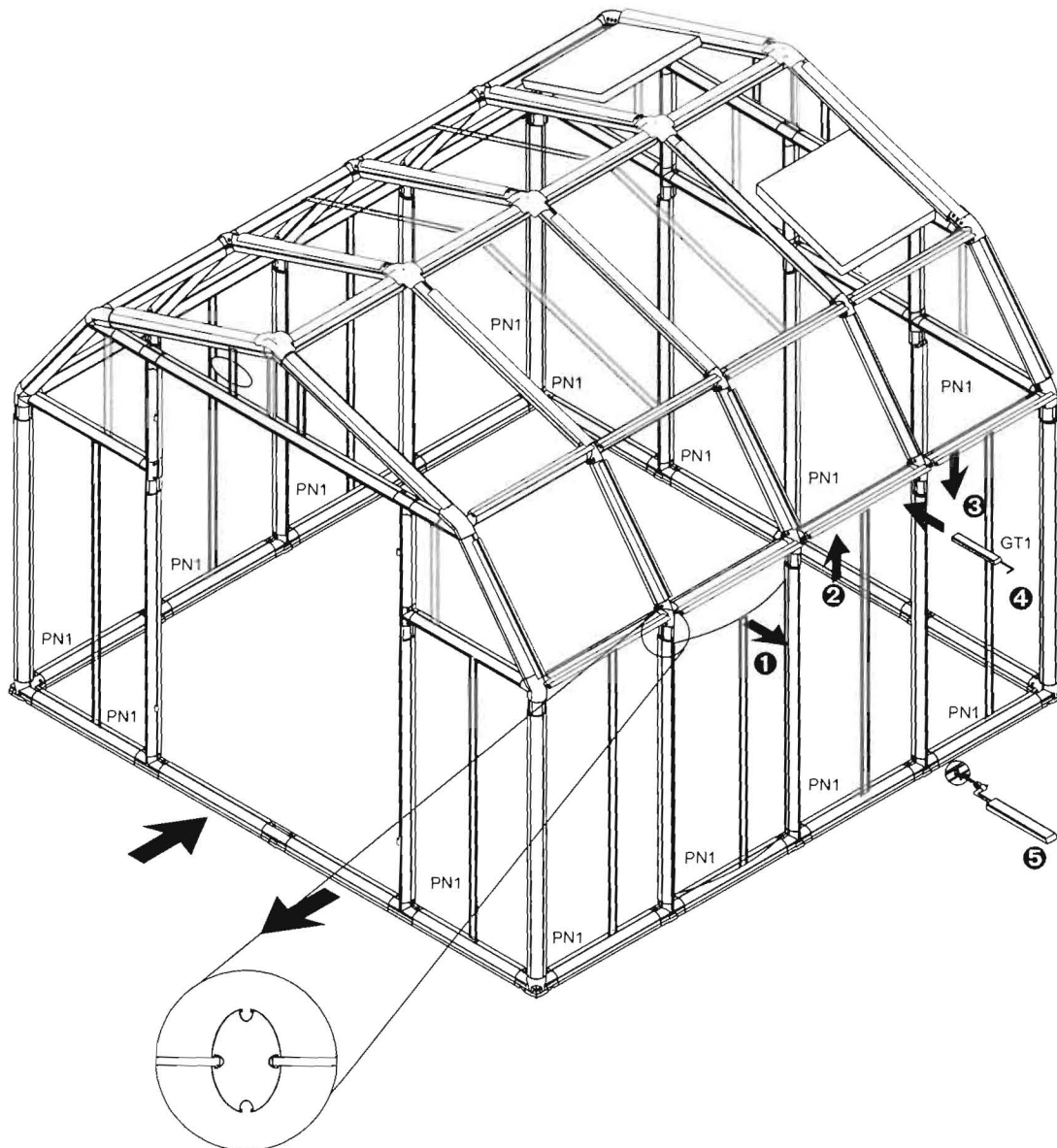
- 6 Place the roof on the columns and circle around the greenhouse and insert the first 1 cm (1/2") of the roof connectors into the columns.

Note: Do not insert the connectors all of the way into the columns at this time in order to provide enough space to install the panels in the next step.

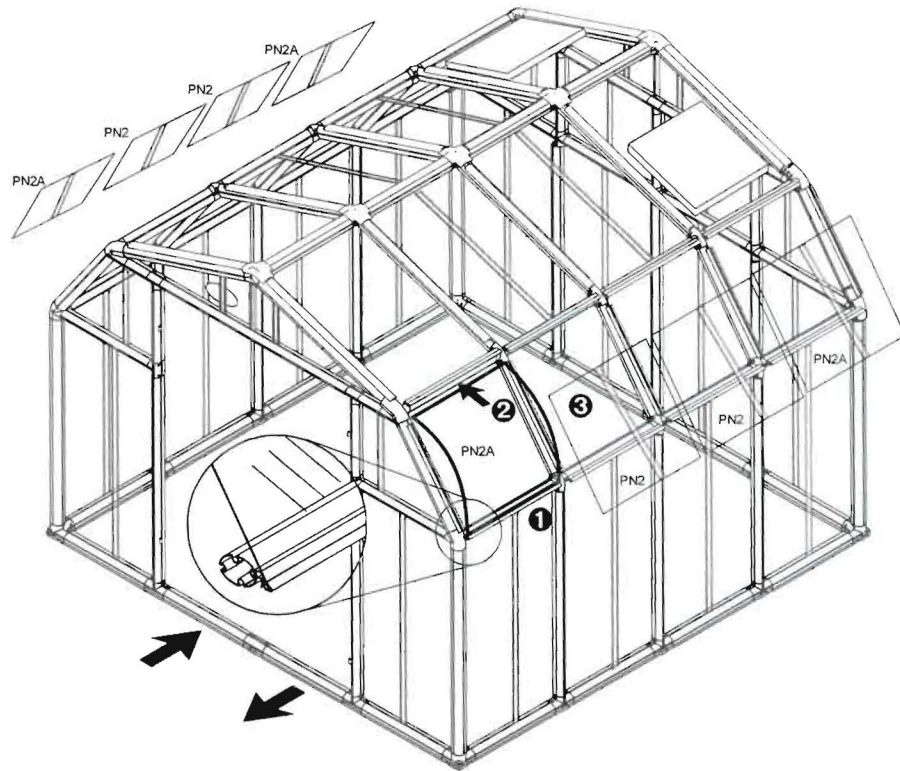


Cover the Walls

- 1 Take a PN1 panel with the plastic ID strip facing out, and put the panel in place by gently curving it so that it enters the side channels of the columns.
- 2 Slide the top of the panel into the channel in the bottom of the roof. Continue with the other PN1 panels.
- 3 Lower the panel towards the frame. Continue with this procedure until all of the PN1 panels are finished.
- 4 Panel by panel, circle around the greenhouse and lower the roof into place. Use the GT1 glazing tool to guide the corners of the PN1 panel into the channels.
- 5 Lock the roof in place with pins and remove the ID strips from the panels.

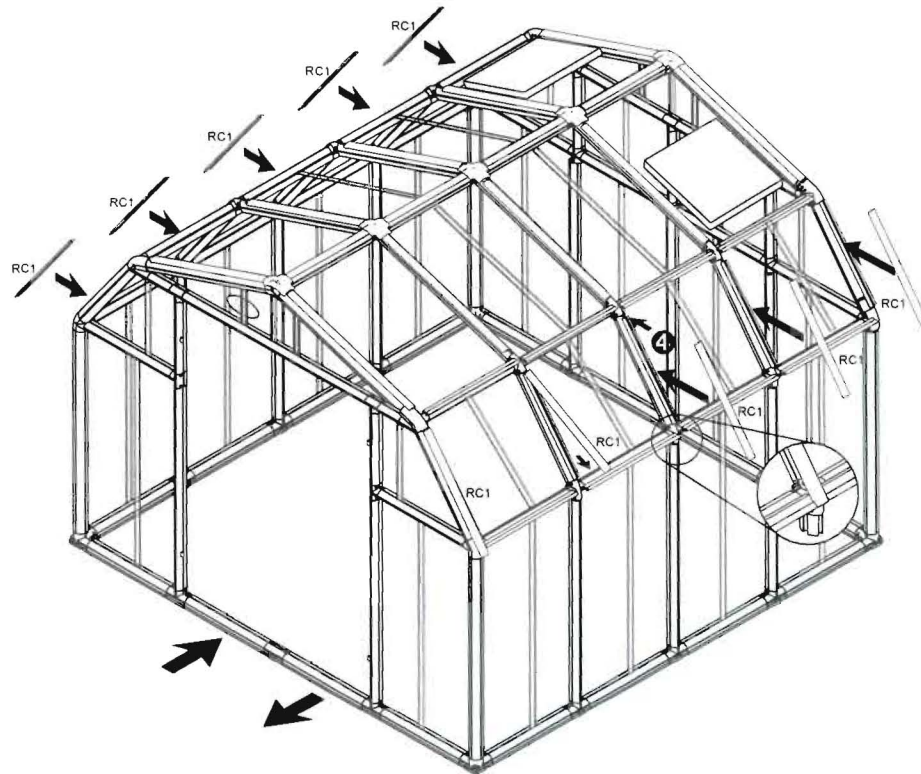


- ❶ Making sure that the plastic ID strip faces out, slide a PN2A panel in the lower RD1 element.
- ❷ Bend the panel until it enters the upper RD1 element.
- ❸ Continue with the rest of the PN2 and PN2A panels.



- ❹ Lock the lower panels into place using RC1 glazing elements. Make sure that the end of the RC glazing elements are in line with the bottom of the RD elements.

Note: You may now remove the plastic ID strips from the panels.



Seal Panels

❶ Take the roll of GF sealer, divide it as shown, and pull out enough for one side of a PN1 panel.

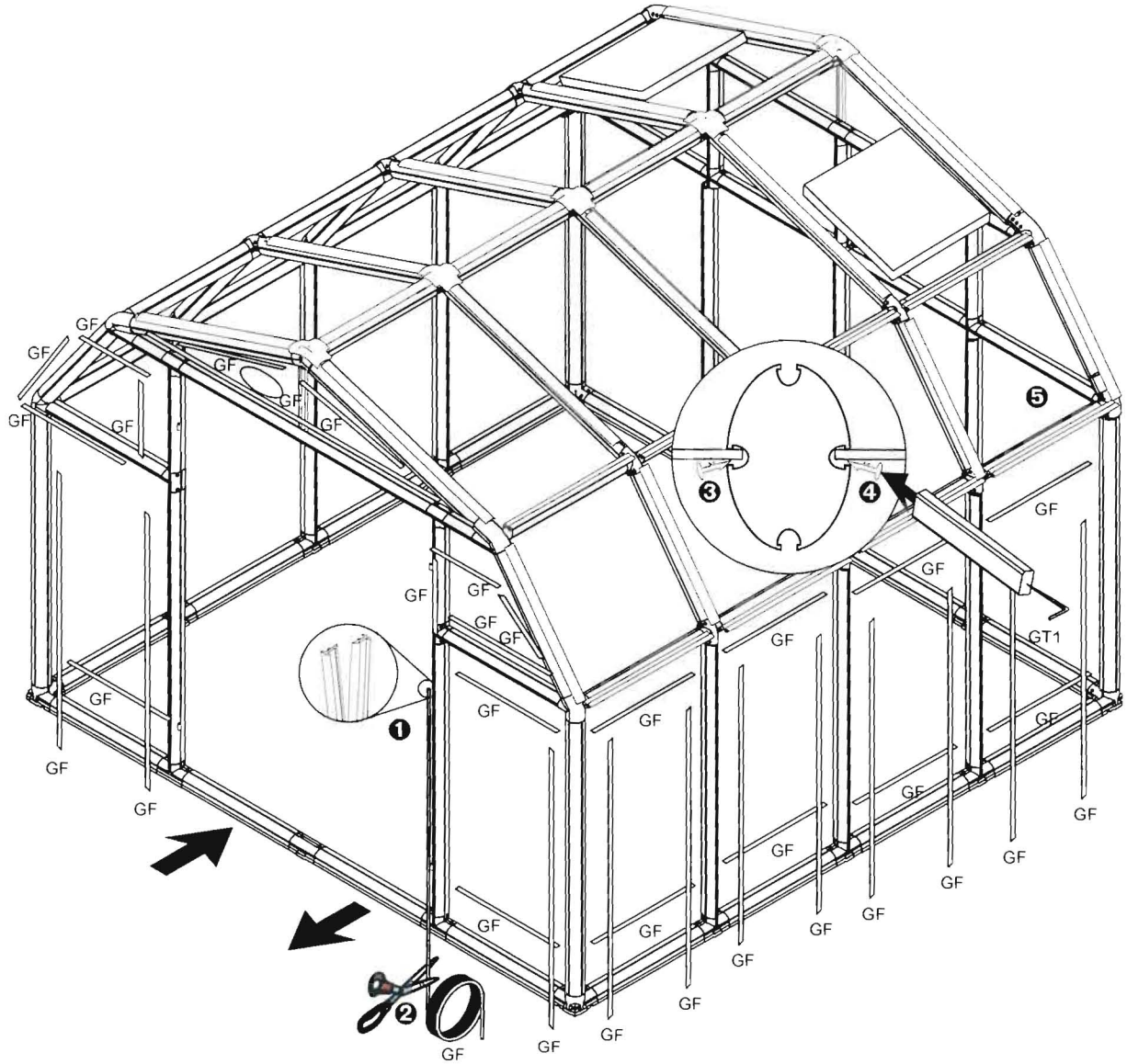
Note: If the GF Sealer is not divided it will not fit in the channel of the column profile.

❷ Cut it to length.

❸ Align it with the channel of the column profile with the double ridge facing the panel.

❹ Push it in to seal the panel using the GT1 glazing tool if needed.

❺ Repeat for the other PN1 panels and the panels in the front and back pediments.



Assemble the Doors

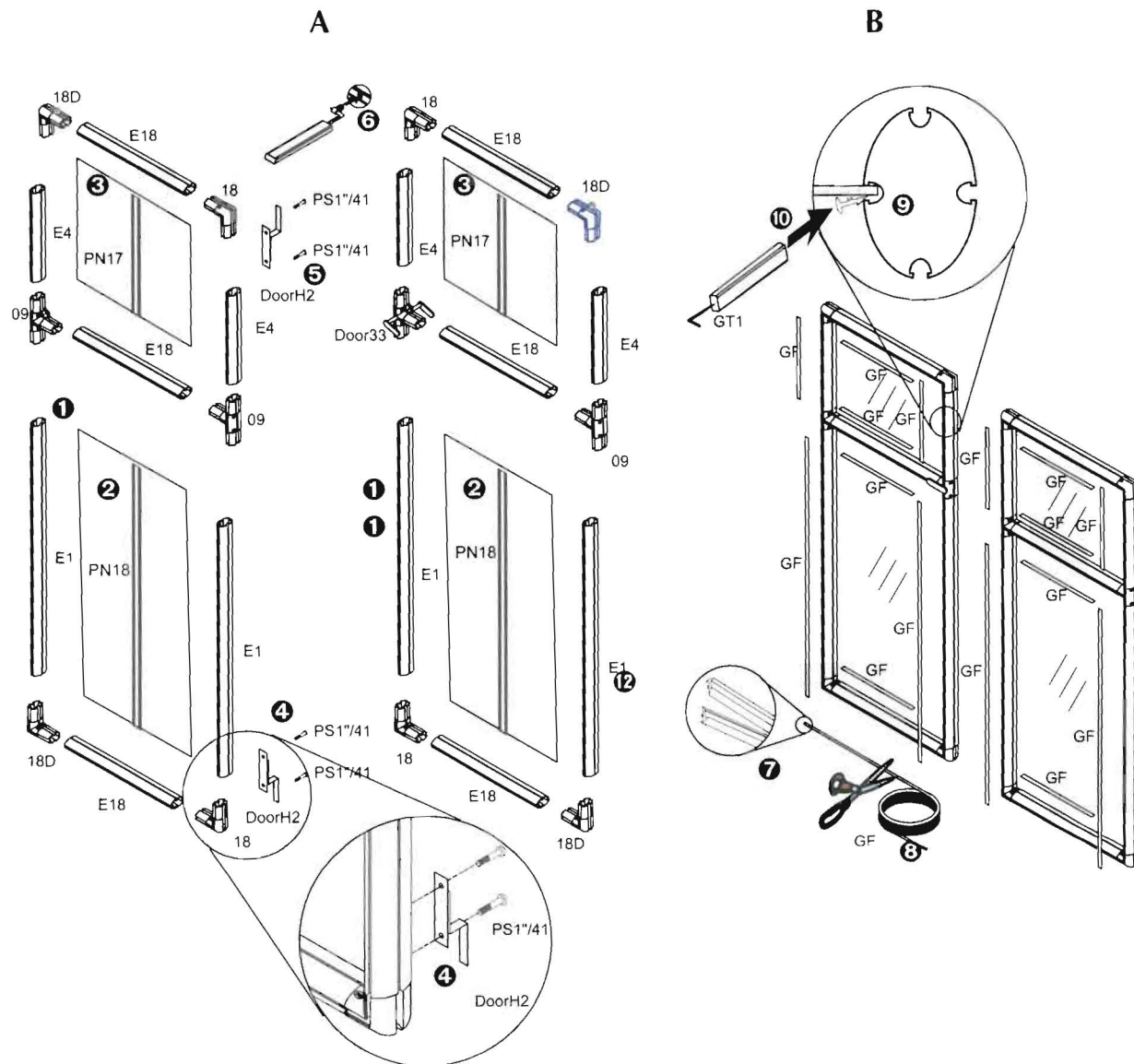
Procedure A

- 1 Assemble the profiles and connectors of the lower portion of the doors. Use the DoorH33 handle where shown on the left door.
- 2 Put the PN18 panel in place with the plastic ID strip facing outwards.
- 3 Assemble the upper portion of the door. Put the PN17 panel in place with the plastic ID strip facing outwards.
- 4 Connect the lower DoorH2 inner latch on the left door. Insert the bottom PS1"/41 screw into the hole for the pin.
- 5 Connect the upper DoorH2 inner latch on the left door. Insert the top PS1"/41 screw into the hole for the pin.

- 6 Lock the door together with pins. You may now remove the plastic ID strips.

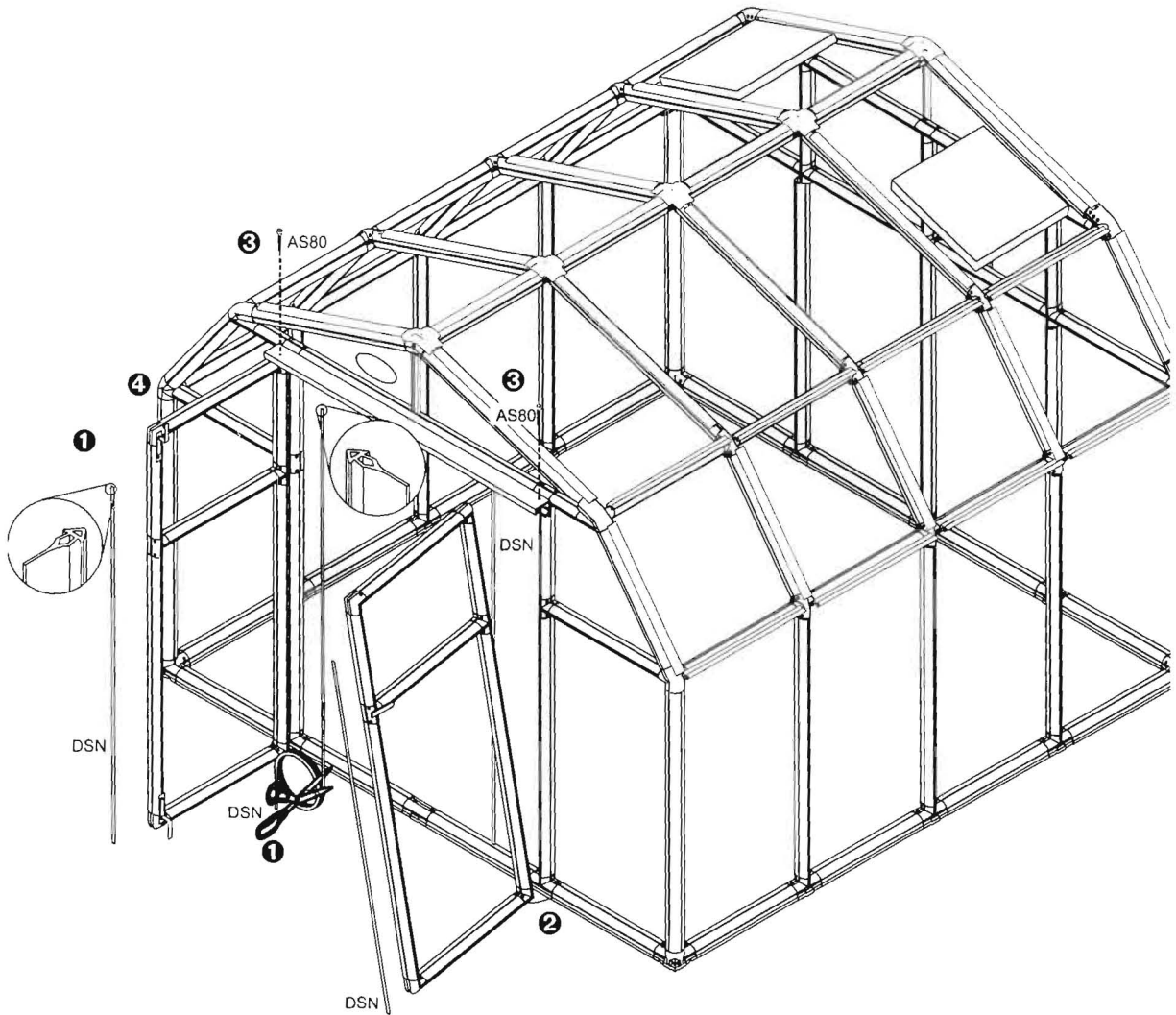
Procedure B

- 7 Take the roll of GF sealer and divide it as shown.
- Note:** If the GF Sealer is not divided it will not fit in the channel of the column profile.
- 8 Measure GF sealer for the edges of all panels.
- 9 Align the GF with the channels of the column profiles with the double ridge facing the panels.
- 10 Push them in to seal the panel using the GT1 glazing tool if needed.



Hang the Doors

- 1 Cut two pieces of DSN Door Sealer and place in the channels of the hinged lintels.
- 2 Hang the left door on the hinges.
- 3 On the inside part of the door screw the LAT1 Inner Door Latch into the profile using the PS1"/14 Inner Door Latch Screw.
- 4 Hang the right door on the hinges.



Final Touches

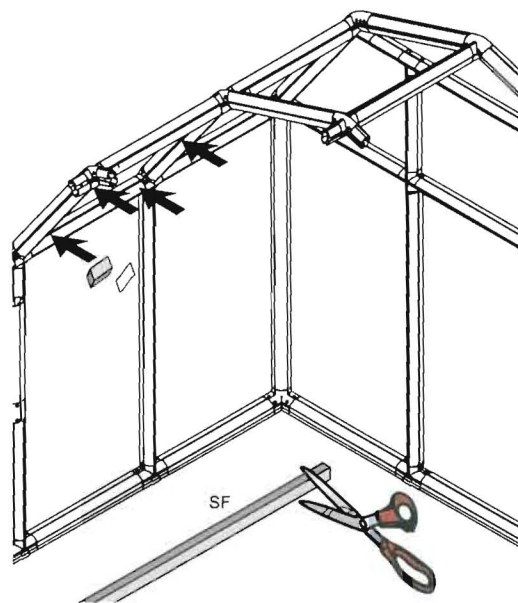
Go inside your new Greenhouse and seal any gaps between the PN2 and PN2A panels and the profiles using SF soft foam insulation. Cut pieces of SF soft foam insulation 2.5 cm (1") long, remove the adhesive backing, and place where shown, making sure that the area is clean and dry.

Congratulations! Your Greenhouse is now completed. You will find it easy to clean and maintain.

Put this manual in a safe place so you can refer to it if you decide to add options or need to make a repair.

For your safety and convenience, please take note of the following:

- Examine your Greenhouse for sharp edges and trim with a razor knife if necessary.
- It is important to clear your Greenhouse of snow in the winter.
- Make sure that the temperature in the greenhouse never exceeds 70° C (155° F). Ensure good ventilation during hot days or provide a shading screen. This is especially important if you live in a hot climate.
- Always close roof vents in high winds.


























Rion offers a wide range of options for your new Greenhouse, including modular shelves, irrigation systems, additional windows, automatic window openers, and others.














Thank you for your purchase. We wish you many years of pleasure with your greenhouse. Please feel free to contact us with any questions, comments, or suggestions.



| International Headquarters | North American Distributor |
|--|---|
| Rion Ltd. Cabri 25120 ● Israel Tel: +972-4-995-2666, Fax: +972-4-995-2677 email: rion@rion.com homepage: http://www.rion.com | Systems Trading Corporation 450 Seventh Ave. Suite 2803 ● New York, NY 10123 For Customer Service (Toll-Free) 877-407-9100 Ext. 1 To E-Mail: customerservice@stcaustin.com To Send a Fax: 512-407-9242 |

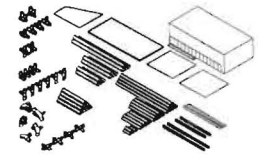


| | Part Code | GH44 | GH46 | GH48 | Description |
|---|-----------------------|------|------|------|---|
|  | AS80 | 4 | 4 | 4 | Door Runner Screw / Wingnut |
|  | Door33 | 1 | 1 | 1 | Door Handle |
|  | R1 | 4 | 4 | 4 | Round Profile (113 cm, 3' 8 1/2") |
| | R8 | 4 | 4 | 4 | Round Profile (80.2 cm, 2' 7 9/16") |
| | R2 | 4 | 4 | 4 | Round Profile (53.4 cm, 1' 9") |
|  | E12 | 1 | 1 | 1 | Oval Profile (116.2 cm, 3' 9 3/4") |
| | E1 | 15 | 19 | 23 | Oval Profile (113 cm, 3' 8 1/2") |
| | E6 | 6 | 10 | 14 | Oval Profile (85 cm, 2' 9 7/16") |
| | E2 | 34 | 48 | 62 | Oval Profile (54 cm, 1' 9 1/4") |
| | E18 | 6 | 6 | 6 | Oval Profile (51.4 cm, 1' 8 1/4") |
| | E4 | 9 | 9 | 9 | Oval Profile (39.4 cm, 1' 3 1/2") |
| | E5 | 4 | 4 | 4 | Oval Profile (13.4 cm, 5 1/4") |
| | | | | | |
|  | SR1 | 2 | 2 | 2 | Inner Round Profile (40 cm, 1' 3 3/4") |
|  | D1 | 2 | 2 | 2 | Side Cap |
|  | D2 | 3 | 5 | 7 | Middle Cap |
|  | PN1 | 14 | 18 | 22 | Wall Panel - (59.7 x 118.3 cm) (1' 11 1/2" x 3' 10 9/16") |
|  | PN2 | 4 | 8 | 12 | Lower Roof Panel - (60.5 x 66.7 cm) (1' 11 13/16" x 2' 2 1/4") |
|  | PN2A | 4 | 4 | 4 | Lower Roof Panel (side) - (61.7 x 66.7 cm) (2' 5/16" x 2' 2 1/4") |
|  | PN5L | 2 | 2 | 2 | Side Panel (Left) - (58.1 x 44.9 cm) (1' 10 7/8" x 1' 5 1/16") |
|  | PN5R | 2 | 2 | 2 | Side Panel (Right) - (58.1 x 44.9 cm) (1' 10 7/8" x 1' 5 1/16") |
|  | PN8R | 2 | 2 | 2 | Pediment Panel Half (Right) |
|  | PN8L | 2 | 2 | 2 | Pediment Panel Half (Left) |
|  | ST7 | 4 | 4 | 4 | Window Couplers |
|  | PN9 | 2 | 2 | 2 | Upper Back Wall Panel - (59.9 x 44.7 cm) (1' 11 9/16" x 1' 5 3/8") |
|  | PN40 | 4 | 8 | 12 | Top Roof Panel - (60.5 x 97.6 cm) (1' 11 13/16" x 3' 2 3/8") |
|  | PN40A | 2 | 2 | 2 | Top Roof Panel (outside) (61.7 x 97.6 cm) (2' 5/16" x 3' 2 7/16") |
|  | PN17 | 2 | 2 | 2 | Door Panel (top) - (57.1 x 45.1 cm) (1' 10 1/2" x 1' 5 3/4") |
|  | PN18 | 2 | 2 | 2 | Door Panel (bottom) - (57.1 x 118.7 cm) (1' 10 1/2" x 3' 10 3/4") |
|  | WIN33 | 2 | 2 | 2 | Roof Vent |
| | WINH31 | 2 | 2 | 2 | Roof Vent Handles (packages of 2) |
|  | GSC10 | 2 | 2 | 2 | Back Pediment Strengthening Bar |
|  | GSC12 (inside E12) | 1 | 1 | 1 | Front Pediment Strengthening Bar |

| | Part Code | GH44 | GH46 | GH48 | Description |
|--|-----------|------|------|------|---|
|  | DSN | 1 | 1 | 1 | Door Sealer (roll) |
|  | CF | 1 | 1 | 1 | Flexible Glazing Seal (roll) |
|  | RA1 | 4 | 6 | 8 | RA Glazing Element (57.3 cm, 1' 10 ⁹ / ₁₆ " |
|  | RB4 | 6 | 10 | 14 | RB Glazing Element (84.8 cm, 2' 9 ⁹ / ₁₆ " |
| | RB6 | 4 | 4 | 4 | RB Glazing Element (80 cm, 2' 7 ¹ / ₂ " |
| | RB1 | 10 | 14 | 18 | RB Glazing Element (52 cm, 1' 8 ¹ / ₂ " |
|  | RC5 | 10 | 14 | 18 | RC Glazing Element (95.5 cm, 3' 1 ⁵ / ₈ " |
| | RC1 | 10 | 14 | 18 | RC Glazing Element (66.6 cm, 2' 2 ¹ / ₄ " |
| | RC3 | 4 | 6 | 8 | RC Glazing Element (58 cm, 1' 10 ³ / ₁₆ " |
|  | RD1 | 16 | 24 | 32 | RD Glazing Element (56.9 cm, 1' 10 ³ / ₁₆ " |
|  | PIN1 | 3 | 5 | 7 | Connector Pin (packages) |
|  | GT1 | 2 | 2 | 2 | Pin and Glazing Tool |
|  | SF | 1 | 1 | 1 | Soft Foam Roof Insulation (roll) |
| SUPP1 | | 3 | 5 | 7 | Roof Reinforcement Kit (Packets) |
|  | AS 70 | 6 | 10 | 14 | Cable screw |
|  | AW5 | 1 | 1 | 1 | Allen Wrench |
|  | Hook1 | 3 | 5 | 7 | Top Catch |
|  | CAB40 | 3 | 5 | 7 | Cable |

Prepare Your Parts for Assembly

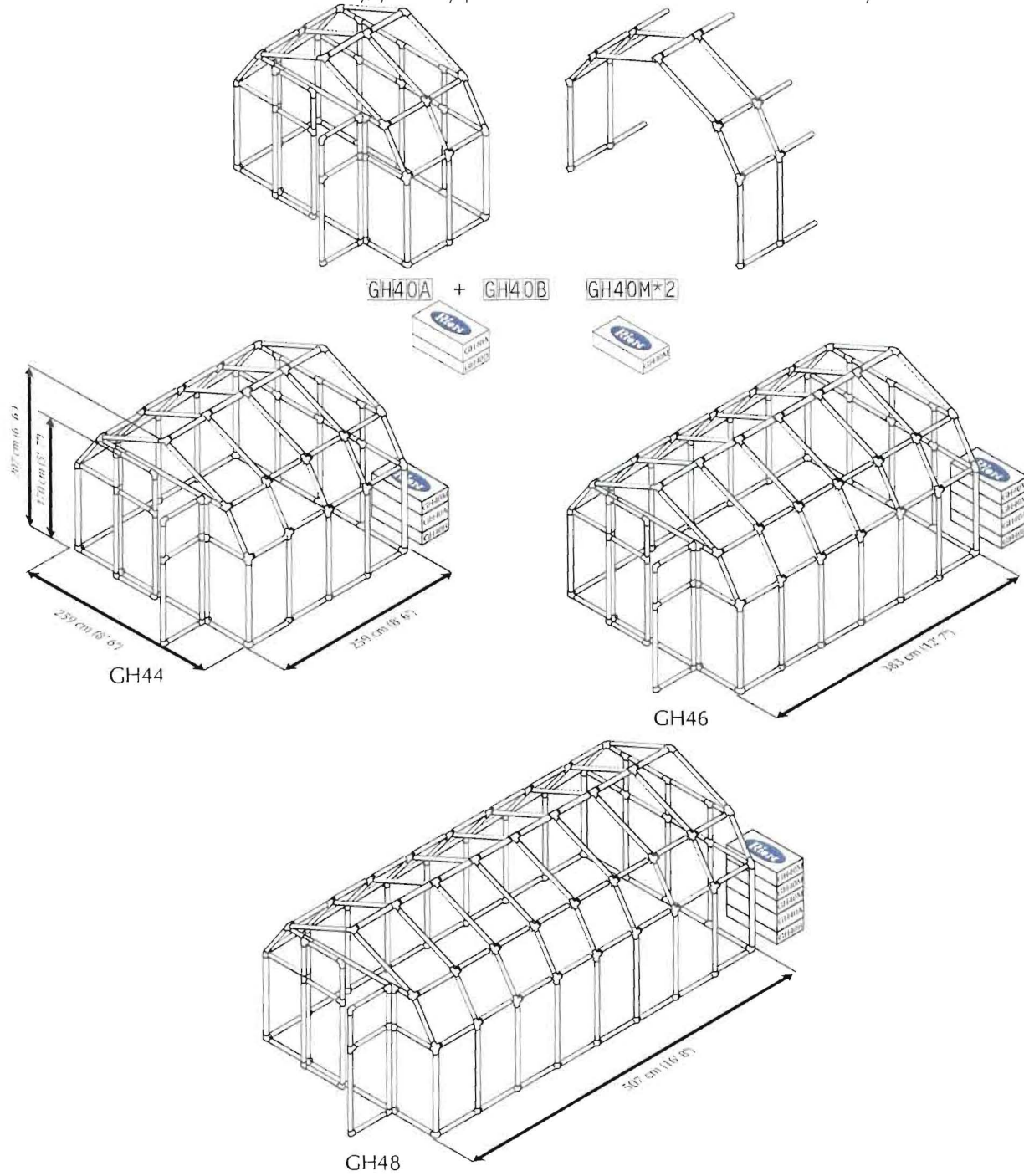
Remove everything from your packages and sort them according to part type. Since assembly is done from taking parts from every box, it is best to put everything together. The boxes are printed with a ruler to help you distinguish between profiles.



Note: Protect unassembled panels from the sun to prevent identification stickers from adhering to the glazing.

Identify Greenhouse Parts

Because of the Greenhouse modularity, you may purchase additional GH40M modules to fit your needs.




















Take a minute to make sure you have everything you need.

Note: Do not proceed with assembly if any parts are missing.

The part code is stamped on each connector. Profiles are listed in order by size, largest to smallest. Panels are identified with stickers.

Exact dimensions can be found in the packing list.

The drawings in this manual are designed for the greenhouse owner who has purchased a GH44, which consists of one front unit (GH40A), one back unit (GH40B) and . If you have purchased additional modules the instructions are indicated in the text.

| | Part Code | GH44 | GH46 | GH48 | Description |
|---|-----------|--------|--------|--------|---|
|  | 01 | 4 | 4 | 4 | Corner Frame Connector |
|  | 2D | 11 | 15 | 19 | Frame Connector |
|  | 15 | 1 | 1 | 1 | Doorway Frame Connector |
|  | 3A | 2 | 2 | 2 | Left Rib Connector |
|  | 4A | 2 | 2 | 2 | Right Rib Connector |
|  | 5A | 15 | 25 | 35 | Rib Connector |
|  | 6A | 2 | 2 | 2 | Left Pediment Connector |
|  | 7A | 2 | 2 | 2 | Right Pediment Connector |
|  | 8A | 2 | 2 | 2 | Top Pediment Connector |
|  | 09 | 10 | 10 | 10 | T-Oval Connector |
|  | 10 | 3 | 3 | 3 | Oval Junction Connector |
|  | B2 | 16 | 20 | 24 | Base Profile (50 cm, 1' 7 ¹ / ₈ "") |
|  | 18 18D | 4 4 | 4 4 | 4 4 | Corner Oval Connector Corner Oval Connector (Door) |
|  | Door44 | 1 | 1 | 1 | Upper Door Lintel (1290 cm, 4'2 ³ / ₄ "") |
|  | PS1"/14 | 4 | 4 | 4 | Inner Door Latch Screw |
|  | Door22 | 2 | 2 | 2 | Bottom Door Hinge |
|  | DoorH2 | 2 | 2 | 2 | Inner Door Latch |

Introduction

Congratulations on purchasing a Rion Greenhouse. We are certain that it will give you many happy years of pleasure in your garden.

The drawings in this manual are designed for the greenhouse owner who has purchased a GH44, which consists of one front unit (GH40A), and one back unit (GH40B). If you have purchased additional modules the instructions are indicated in the text.

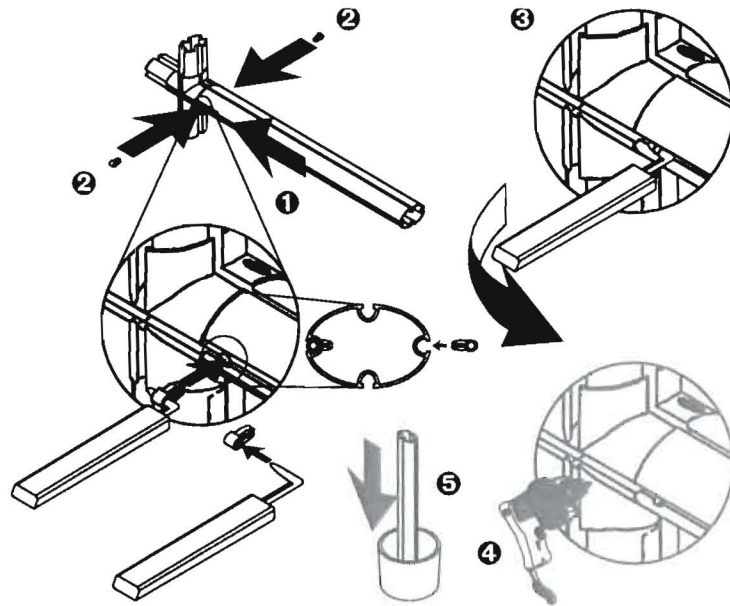
The Greenhouse has been designed to be as easy to put together as it is beautiful to look at. Most of the work can be done by a single person. Only attaching the roof requires the help of a family member or neighbor for a short while.

Easy assembly methods eliminate the need for tools or special expertise.

- ❶ Connect the specified parts.
- ❷ Match the holes in the profiles and the connectors. Place a pin on the pin tool and push the pin through the lined-up holes to lock the parts in place. Many connections require pins on both sides.

Note: *Extra pins are included.*

- ❸ If you wish to disassemble the parts at any time, remove the pins using the pin tool. Place the end into the exposed hole and lever the pin out.
- ❹ If a hole in the connector is missing, drill a hole with a 6 mm (1/4") drill bit through the assembled profile and then insert the pin.
- ❺ In extremely rare cases connectors will not slip into some round or oval profiles. In this case place the affected part into 10 cm (4") of boiling water for 15 seconds before connecting.



Note: *In some models profiles have identification stickers. We recommend removing them as you work.*

Greenhouse assembly is done in the following steps:

- Prepare a Foundation for Your Greenhouse** (page 3)
- Identify Greenhouse Parts** (page 4)
- Prepare Your Parts for Assembly** (page 7)
- Lay Out the Greenhouse Frame** (page 8)
- Secure the Frame to the Foundation** (page 9)
- Assemble the Roof Pediments** (page 10)
- Assemble Roof Framework** (page 12)
- Cover the Greenhouse Roof** (page 13)
- Raise the Roof** (page 16)
- Cover the Walls** (page 17)
- Seal Panels** (page 19)
- Assemble the Doors** (page 20)
- Hang the Doors** (page 21)
- Final Touches** (page 22)

Prepare a Foundation for Your Greenhouse

Before assembling your new Greenhouse a proper foundation must be prepared. A number of anchoring options are possible, based on wind and ground conditions in your area. Make sure that you have checked with your local authorities regarding any required building permits.

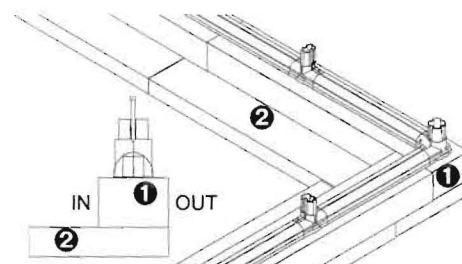
Decide at this time the final orientation of your Greenhouse. We recommend that you place your greenhouse in a spot where it will receive direct sunlight and will be protected from the wind as much as possible. The door should not face prevailing winds. It is important to clear your Greenhouse of snow in the winter.

Modular Base (Option)

If you have purchased the optional Greenhouse Modular Base follow the assembly instructions in the packaging. The Greenhouse Modular Base can be placed in an excavated hole or on the ground. In either case you will require sufficient gravel, earth or other suitable material to fill the base (see table below). All required hardware is included.

Treated Wood Base

Build a framework composed of 4 × 6 (1) and 2 × 12 (2) treated lumber using deck screws or galvanized lag bolts and fill it with gravel or earth or other suitable material to fill the base up to the top surface of the 4 × 6 (1). Attach the greenhouse frame through the connectors using screws that are 6 mm (1/4") in diameter and no less than 70 mm (2 3/4") long (not supplied).



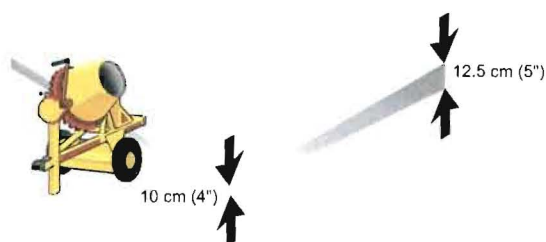
| Model | Base Width | Base Length | Fill Quantity | Screw/Lagbolts |
|-------|------------------------|--------------------------|-----------------------------------|----------------|
| GH44 | 2.65 meter (8' 8 5/8") | 2.65 meter (8' 8 5/8") | 0.68 cubic meters (24 cubic feet) | 20 |
| GH46 | 2.65 meter (8' 8 5/8") | 3.90 meter (12' 9 5/8") | 1.02 cubic meters (36 cubic feet) | 28 |
| GH48 | 2.65 meter (8' 8 5/8") | 5.14 meter (16' 10 3/8") | 1.36 cubic meters (48 cubic feet) | 36 |

Concrete Foundation

Prepare a poured concrete foundation according to local building codes. Do not excavate and pour concrete in frozen ground. Make sure that there is a slight slope for drainage.

Pour your foundation according to the size of the greenhouse model you have selected. Make sure that the foundation is at least 10 cm (4") larger than the size of the greenhouse. The

Greenhouse is secured to the concrete foundation using screws and concrete anchors or expansion anchors (not supplied). Use screws 6 mm (1/4") in diameter and no less than 70 mm (2 3/4") long. A drill with an appropriate masonry bit is required.



| Model | Modules | Foundation Width | Foundation Length | Screw/anchor set or expansion anchor |
|-------|--------------|---------------------|----------------------|--------------------------------------|
| GH44 | GH40A++GH40B | 2.70 meter (8' 10") | 2.70 meter (8' 10") | 20 |
| GH46 | GH40A++GH40B | 2.70 meter (8' 10") | 3.95 meter (12' 11") | 28 |
| GH48 | GH40A++GH40B | 2.70 meter (8' 10") | 5.20 meter (17') | 36 |

Note: You may assemble the greenhouse on its base on a hard surface and move it to its final position when you have finished. Make sure that there are no obstructions between the assembly area and the final position.

Other Foundation Options

Wood Deck

Your Greenhouse can be secured to a wood deck with screws (not supplied) through the frame connectors. Use screws that are 6 mm (1/4") in diameter and no less than 70 mm (2 3/4") long. Make sure that the wood deck itself is securely anchored to the ground. See hardware quantities and foundation measurements above.

Excavated Trench

Your Greenhouse can be placed in an excavated trench to anchor it to the ground. See the foundation measurements above for dimensions.

foundation to be used

Rion GH40 Greenhouse Assembly Instructions



Modular greenhouses, garden sheds, outdoor garden elements and accessories
Designed and manufactured by Rion
A Member of the Plasson Group

| International Headquarters | North American Distributor |
|--|---|
| Rion Ltd. Cabri 25120 ● Israel Tel: +972-4-995-2666, Fax: +972-4-995-2677 email: rion@rion.com homepage: http://www.rion.com | Systems Trading Corporation 450 Seventh Ave. Suite 2803 ● New York, NY 10123 For Customer Service (Toll-Free) 877-407-9100 Ext. 1 To E-Mail: customerservice@stcaustin.com To Send a Fax: 512-407-9242 |

Safety First

- Check the contents of the greenhouse packaging against the packing list and the required parts for your model on page 4 and following. **Do not begin assembly if any parts are missing.**
- Please read these *Assembly Instructions* completely before assembly and keep them in your records so you can refer to them if you wish to add options or make repairs.
- The instructions in this manual lead you through each step in the assembly process. It is important for you to follow them closely.
- We recommend that you use gloves during assembly.
- Rion is not responsible for the misuse of tools or parts.
- If local building codes require permits or licenses make sure that they are acquired before beginning.
- Your Greenhouse should be securely anchored to the prepared foundation or the Modular Base (available as an option) using the recommended hardware.
- If you prepare a concrete foundation do not excavate and pour concrete in frozen ground.
- Exercise caution when lifting heavy assemblies.
- Do not attempt to assemble your Greenhouse in high winds.
- We recommend that you place your Greenhouse in a spot where it will receive direct sunlight and will be protected from the wind as much as possible. The door should not face prevailing winds.
- When your Greenhouse is fully assembled examine it for sharp edges and trim with a razor knife if necessary.
- Close all roof vents in high winds.
- It is important to clear your Greenhouse of snow in the winter.
- Make sure that the temperature in the greenhouse never exceeds 70° C (155° F). Ensure good ventilation during hot days or provide a shading screen. This is especially important if you live in a hot climate.

Required Tools

Before you start assembly have the following available:

- Measuring tape
- Spirit level
- Scissors
- Gloves
- Razor knife

Note: *You may find some parts easier to assemble if you first moisten them with soapy water.*

Concrete Foundation

- 70 mm x 6 mm (2¾" x ¼") screws and concrete anchor set or expansion anchor. (See quantities on page 3.)
- Hammer
- Power drill and appropriate masonry bit
- Screwdriver for screws or wrench for expansion anchors. A power tool with the appropriate bit is recommended.

Note: *If you have purchased a Modular Base all hardware is included.*

Accessories

- Your Greenhouse comes with two roof vents. Additional roof vents (Part WIN33AC) are available as an option.
- A Modular Base can be purchased for your Greenhouse's foundation.