BUCKINGHAM MFG.

WARNINGS / INSTRUCTIONS

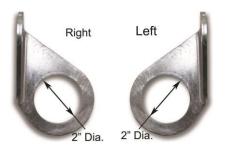
Flange Part Numbers:

- 30R-F1, 30R-F2, 30R-F3, 30R-F4
- 30L-F1, 30L-F2, 30L-F3, 30L-F4

Note: R = attachment hole offset to right,

L = attachment hole offset to left

• 30-F1, 30-F2, 30-F3, & 30-F4)





30R-F/30L-F Series

30- F Series

Hole Sizes

30R / 30L- F Series	30-F Series
Connector hole = 2" diameter for all Flanges.	Connector hole = 1-1/4" diameter for all Flanges.
PN 30R-F1 / 30L-F1 = 11/16" bolt hole diameter.	PN 30-F1 = 11/16" bolt hole diameter.
PN 30R-F2 / 30L-F2 = 15/16" bolt hole diameter.	PN 30-F2 = 15/16" bolt hole diameter.
PN 30R-F3 / 30L-F3 = 13/16" bolt hole diameter.	PN 30-F3 = 13/16" bolt hole diameter.
PN 30R-F4 / 30L-F4 = 1-1/16" bolt hole diameter.	PN 30 -F4 = 1 - $1/16$ " bolt hole diameter.

Installation Instructions

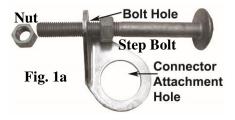
Buckingham Flanges are not supplied with fasteners (step bolts or tower bolts).

Only approved step bolts or tower bolts may be used to attach Flanges to structures. Buckingham suggests the use of galvanized fasteners (ref. ASTM A394 Type O).

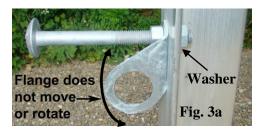
The installation instructions outlined in this document show the Flange being attached using a galvanized step bolt (ref. ASTM A394 Type O).

- Prior to installation, visually inspect the Flange per the inspection section outlined in this document.
- ♦ Ensure that the support structure is capable of maintaining a 5,000 lbf. (22.2 kN) minimum shock load.
- The support structure mounting holes must be compatibly sized with the step bolt threads.
- The Flange must be attached flush with the support structure, and with the bolt hole towards the top of structure. Never mount the Flange with the plane of the connector attachment hole parallel to the ground surface.
- Install a compatible nut onto the step bolt and run to the end of threads (Fig.1a & 1b).
- ♦ Insert the step bolt threads into the Flange bolt hole (not the connector attachment hole, which is larger) (Fig.1a & 1b) and into the support structure hole (Fig.2a & 2b).
- Insert a flat washer or lock washer onto the step bolt threads on the "back side" of the support structure.
- Thread a second nut onto the step bolt threads on the "back side" of the support structure (Fig.3a & 3b).
- Tighten the nut to the appropriate torque required for the thread size.
- Test that the Flange does not move. If the Flange moves, remove it, and repeat the installation procedure (Fig.3a & 3b).

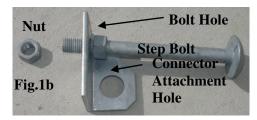
30R-F Series (shown below)

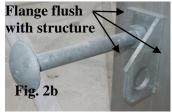






30-F Series







Inspection

Inspection prior to each installation should include but not be limited to:

- Visually check the entire product to ensure no cracks, corrosion, dents, or damage (especially threads) exist.
- Visually inspect to ensure no excessive wear, especially in the anchor loop area exists.

Remove from service, destroy and discard unit if it does not pass this inspection and replace immediately.

After installation to support structure:

- Visually check the entire product to ensure no cracks, corrosion, dents, damage and excessive wear, especially in and around the connector attachment hole exists.
- Ensure that the connector attachment hole is properly positioned (i.e. the bottom of the attachment hole is pointing towards the ground, not parallel to the ground surface).
- Ensure that the Flange is flush with the support structure and nuts have been adequately tightened.

Remove from service, destroy and discard unit if it does not pass this inspection and replace immediately.

Warnings

- This equipment is intended for use by properly trained professionals only.
- Manufacturer's instructions shall be provided to the user of this product. If additional copy is needed, contact Buckingham Mfg.
 Co. or obtain from Buckingham's website at www.buckinghammfg.com.
- Completely read, understand, and follow all instructions, warnings, and guidelines pertaining to this and all associated equipment before use. Failure to do so could result in your serious injury or death.
- ♦ Employer instruct your employees as to proper use, warnings and cautions before use of this equipment.
- Fall protection equipment, (i.e. fall arrest, work positioning, retrieval, suspension, travel restraint, etc.) should not be resold or provided to others for re-use after use by original user as assurance cannot be granted that a used product meets criteria of applicable standards and is safe for use to a subsequent user.
- Selection of products should be such that they aid the worker in the performance of their job and particular work situation. Therefore, be certain this equipment is suitable for the intended use and work environment. It should only be used as personal protection equipment. If suitability for intended use is questionable, always consult your Supervisor, Safety Director or contact Buckingham Mfg. at 1-800-937-282.
- Equipment subjected to impact loading must be immediately removed from service, destroyed, and discarded.
- Only one personal fall arrest system may be attached to each Flange at a single time.
- Fall arrest anchor points must support a minimum of 5,000 lbf. (22.2 kN) per attached worker and be independent of worker support.
- OSHA requires that impact force in a fall NOT exceed an 1800 lbf. limit with a harness. Keep connecting device slack to a
 minimum or use a deceleration unit to stay under these limits.
- Rig to avoid contact with structures below in a fall.
- ♦ Always keep anchor point above rear D-ring of your personal fall arrest unit.
- ♦ <u>Always</u> work directly under fall arrest anchor point to avoid swing fall injuries (pendulum effect).
- Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs / modifications to this equipment.
- Use PPE equipment only for the specific purpose for which it is designed and intended, Step bolts are for personal use only.
 NOT for hoisting.
- When utilizing the anchor point of this product, it should only be used with a compatible sized locking snap hook / carabiner meeting applicable OSHA requirements.
- Ensure there is no pressure on the snap hook locking mechanism sufficient to depress it as this will, due to its length, render it incompatible with currently designed D-rings and make it very susceptible to rollout.
- Always visually check that the snap hook/carabiner freely engages D-ring or anchor point and the keeper / gate is completely
 closed with each use. Never rely solely on the feel or sound of the snap hook / carabiner engaging.
- Ensure snap hooks / carabiners are positioned so that their keepers / gates are never load bearing.
- Avoid contact of this product with electrical hazards, moving machinery, chemicals, high temperature surfaces, welding, or other heat sources which may damage the material.
- Always visually check the entire product for any cracks, corrosion, dents, or damage (especially threads). If any defects are found, immediately destroy the product to prohibit its use.
- Ensure all step bolts and Flanges are properly secured to the support structure according to the instructions outlined in this document.
- Product covered under these instructions / warnings should not be resold / redistributed or reused after use by original user.

Storage

- Proper maintenance and storage of your equipment will prolong its useful life and contribute toward its performance.
- Flanges not in use must be stored in a clean dry area and should be protected from dirt, chemicals and moisture in closed containers.
- ♦ Flanges that accumulate rust resulting from plant or job-site conditions should not be used until inspected and approved for use by a competent person.
- ♦ When removed from storage, the Flanges MUST be inspected per the above inspection criteria prior to installation.

NOTE: Ensure proper fit / size of product before use. This product <u>cannot</u> be returned unless it is in new / unused condition.

BUCKINGHAM MFG. CO., INC.

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