

PURCHASE AND SALE AGREEMENT
(405 South Platte River Drive)

THIS PURCHASE AND SALE AGREEMENT ("Agreement") made and entered into as of the Effective Date set forth below, by and between the **CITY AND COUNTY OF DENVER**, a home rule city and municipal corporation of the State of Colorado, whose address is 1437 Bannock Street, Denver, Colorado 80202 ("Purchaser"), and **MANOAH, LLC**, a Colorado limited liability company, whose address is 1400 Glenarm Place, Suite 100, Denver, Colorado 80202 ("Seller").

RECITALS

A. **WHEREAS**, Seller owns certain real property in City and County of Denver, State of Colorado; and

B. **WHEREAS**, subject to the terms of the Agreement, Seller agrees to sell and Purchaser agrees to purchase the property for essential Purchaser functions, and other related improvements and appurtenances as described;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and obligations set forth herein, and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties agree as follows:

1. **SUBJECT PROPERTY**. Subject to the terms of the Agreement, Purchaser shall purchase and the Seller shall sell the real property generally located at 405 South Platte River Drive, Denver, Colorado, which is more particularly described in **Exhibit A**, attached hereto and incorporated herein by this reference, together with (i) all buildings (consisting of approximately 26,511 square feet), fixtures and improvements on the property and any and all personal property for maintenance of the property; (ii) all easements, rights of way and vacated roads, streets and alleys appurtenant to the property; and (iii) all of Seller's right, title and interest in and to all utility taps, licenses, permits, contract rights, and warranties and guarantees associated with the property (collectively "Property").

2. **PURCHASE PRICE AND EARNEST MONEY DEPOSIT**.

a. **Purchase Price**. The total purchase price for the Property to be paid by Purchaser at Closing is **TWO MILLION THREE HUNDRED TWENTY FIVE THOUSAND DOLLARS AND ZERO CENTS (\$2,325,000.00)** ("Purchase Price"), which may be paid by cash, check, wire transfer or other good funds.

b. **Earnest Money Deposit**. Ten (10) days after mutual execution of this Agreement, Purchaser shall deposit **ONE HUNDRED SEVENTY FIVE THOUSAND DOLLARS AND ZERO CENTS (\$175,000.00)** ("Earnest Money") in to an escrow account held by Land Title Guarantee Company ("Title Company"). If Purchaser elects to proceed to Closing and the Closing occurs, the Earnest Money shall be applied to the Purchase Price. If Purchaser elects not to close due to Seller's failure to cure any defects or conditions objected to and not waived by Purchaser in the manner and within the deadlines set forth in Section 7 below or because of Seller's default hereunder as provided for in this Agreement, the Earnest Money, and any interest accrued thereon, shall be returned to Purchaser within (7) days. In the event the Closing does not occur due to a default by Purchaser, the Earnest Money, and any interest accrued thereon, shall

be given to Seller as liquidated damages in lieu of any other right or remedy which Seller may have at law or in equity.

3. **ENVIRONMENTAL CONDITION.**

a. **Environmental Information.** By the timeframe set forth in paragraph 7(a), Seller shall disclose, in writing, to Purchaser all information Seller has regarding any environmental contamination (including asbestos-contaminated soils) or the presence of any hazardous or toxic substances on, under, or about the Property. In the event Seller acquires any additional information regarding environmental contamination, it has the ongoing duty to provide such information to Purchaser up to the time of Closing, and will do so within five (5) days of the receipt of such additional information. For purposes of the Agreement: "hazardous substances" means all substances listed pursuant to regulation and promulgated under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C., § 9601 *et seq.*, or applicable state law, and any other applicable federal or state laws now in force or hereafter enacted relating to hazardous waste disposal; provided, however, that the term hazardous substance also includes "hazardous waste" and "petroleum" as defined in the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901 *et seq.* §6991(1). The term "toxic substances" means and includes any materials present on the Property that are subject to regulation under the Toxic Substance Control Act ("TSCA"), 15 U. S. C. § 2601 *et seq.*, applicable state law, or any other applicable federal or state law now in force or later enacted relating to toxic substances. The term "toxic substances" includes, but is not limited to, asbestos, polychlorinated biphenyls (PCB's), and lead-based paints.

b. **Environmental Review.** Purchaser, at its sole option and expense, may conduct or cause to be conducted environmental audits and perform other environmental tests on the Property to identify any existing or potential environmental problems located in, on, or under the Property, including but not limited to, the presence of Hazardous Waste, Hazardous Substances or Toxic Substances. Seller hereby grants Purchaser and any of its employees and consultants access to the Property to perform such audits and tests.

c. **Notice of Unacceptable Environmental Conditions, Cure, Purchaser Election.** By the deadline set forth in paragraph 7(b), Purchaser shall give notice to Seller of any unacceptable environmental condition relating to the Property. Seller may elect (in Seller's sole discretion), at Seller's sole cost and expense, to cure such unacceptable environmental conditions by the deadline set forth in paragraph 7(c) to Purchaser's satisfaction. In the event Seller declines to cure the unacceptable environmental conditions or fails to respond to Purchaser's notice thereof by the date set forth in paragraph 7(c), Purchaser, in its sole discretion, may elect to waive such unacceptable conditions and proceed to Closing by the deadline set forth in paragraph 7(d) or treat the Agreement as terminated with no further obligation on the part of either party.

4. **INSPECTION/SURVEY.** The Purchaser has the right to inspect the physical condition of the Property. Seller, at its sole cost and expense, shall provide to Purchaser an update of the existing ALTA survey of the Property and provide such survey to Purchaser in accordance with the schedule set forth in paragraph 7(a) below. This right to inspect is in addition to the right of Purchaser to obtain an environmental audit. The Purchaser shall give notice of any unacceptable physical or survey condition of the Property to Seller by the deadline set forth in paragraph 7(b). Seller may elect (in Seller's sole discretion), at Seller's sole cost and expense, to cure such unacceptable physical or survey condition by the deadline in paragraph

7(c) to Purchaser's satisfaction. In the event Seller declines to cure the unacceptable physical or survey conditions or fails to respond to Purchaser's notice thereof by the date set forth in paragraph 7(c), Purchaser, at its sole discretion, may elect to waive such unacceptable physical or survey condition by the date set forth in paragraph 7(d) and proceed to Closing by the deadline set forth in paragraph 7(d) or treat the Agreement as terminated with no further obligation on the part of either party. Seller hereby grants Purchaser and any of its employees and consultants access to the Property to perform such inspections of the Property.

5. **TITLE.**

a. **Title Review.** Within seven (7) business days after execution of this Agreement, Seller, at Seller's expense, shall provide Purchaser a current commitment for ALTA Form B Seller's Title Insurance Policy for the Property from the Title Company. The title insurance commitment and all copies or abstracts of instruments or documents identified in the commitment shall constitute the title documents ("Title Documents"). The Purchaser has the right to inspect the Title Documents.

b. **Matters Not Shown by the Public Records.** By the deadline set forth in paragraph 7(a), Seller shall deliver to Purchaser complete and accurate copies of all lease(s) and survey(s) in Seller's possession pertaining to the Property and shall disclose, in writing, to Purchaser all easements, liens or other title matters not shown by the public records of which Seller has actual knowledge.

c. **Notice of Unacceptable Condition, Cure, and Purchaser Elections.** The Purchaser shall give notice of any unacceptable condition of title to Seller by the deadline set forth in paragraph 7(b). Seller may elect (in Seller's sole discretion), at Seller's sole cost and expense, to cure such unacceptable conditions by the date in paragraph 7(c) to Purchaser's satisfaction. In the event Seller declines to cure such unacceptable conditions or fails to respond to Purchaser's notice thereof by the date in paragraph 7(c), Purchaser in its sole discretion and by the date set forth in paragraph 7(d), may elect to waive such unacceptable conditions and proceed to Closing or treat the Agreement as terminated with no further obligation on the part of either party.

6. **CLOSING PRE-CONDITIONS.** Seller shall fully cooperate with Purchaser to do all things necessary, including execute reasonable and customary affidavits as necessary and provide adequate assurances necessary for removal of the standard exceptions for defects, liens, mechanic's liens, tax or assessment liens, title insurance, encumbrances, encroachments, prescriptive easements, adverse claims, or similar matters, regarding such matters. Seller's obligation to execute reasonable and customary affidavits, provide adequate assurances for the removal of the standard exceptions from the title insurance policy to be issued are conditions precedent to Purchaser's obligation to purchase the Property. If Seller does not provide the adequate assurances by the date in paragraph 7(d), Purchaser may elect to waive the failure to provide the adequate assurances and proceed to Closing or treat the Agreement as terminated with no further obligation on the part of either party.

Building Improvements. As a condition precedent to Closing, Seller shall complete the improvements to the Property as specifically set forth on **Exhibit B**, attached hereto and incorporated herein by the reference ("Building Improvements Exhibit"). Other than as specifically set forth on the Building Improvements Exhibit, the Property shall be delivered to Purchaser at Closing in its "as-is" condition.

7. **SCHEDULE**

a. **Seller's Disclosure.** Seller shall deliver any documents and make the disclosures required by this Agreement, including paragraphs 3(a) and 5(b), no later than 5 p.m. local time seven (7) business days from Effective Date.

b. **Purchaser's Objection Notice.** The Purchaser shall notify Seller in writing of any unacceptable environmental, physical, survey, title conditions and all other unacceptable matters by 5 p.m. local time, thirty (30) days from receipt of Seller's disclosures established in paragraph 7(a) above.

c. **Seller's Cure.** Seller shall have until no later than 5 p.m. local time ten (10) days from the date of Purchaser's objection notice to cure all the unacceptable conditions set forth in the objection notice.

d. **Purchaser's Election.** The Purchaser shall elect, in writing, to waive any uncured objections and proceed to Closing or to terminate the Agreement by the deadline to cure established in paragraph 7(c) above. If Purchaser elects to proceed to Closing by the date established in paragraph 7(c), the Earnest Money shall be nonrefundable and shall be considered earned by Seller if for any reason Purchaser does not close on the purchase of the Property.

8. **DATE OF CLOSING.** The date of closing will be on a date, time and place mutually agreed upon by the Parties, but no later than June 1, 2015, provided, however, that the closing date may be changed by written mutual agreement between Purchaser's Director of the Division of Real Estate and Seller ("Closing").

9. **TRANSFER OF TITLE.** Subject to tender of the Purchase Price at Closing and compliance with the other terms and provisions of the Agreement, Seller shall execute and deliver a Special Warranty Deed in substantially the form set forth as **Exhibit C**, attached hereto and incorporated herein by this reference ("Deed") to Purchaser at Closing conveying the Property free and clear of all taxes (with proration as provided herein) and free and clear of all liens and encumbrances, except: (i) those matters accepted by Purchaser in accordance with the provisions in the Agreement; (ii) those rights, if any, of third parties in the Property not shown by the public records accepted by Purchaser in accordance with the Agreement; and (iii) subject to applicable building and zoning regulations.

10. **POSSESSION.** Possession of the Property shall be delivered to Purchaser at Closing.

11. **REPRESENTATIONS.** Seller warrants and represents to the best of Seller's actual knowledge that at the time of conveyance except as otherwise disclosed to Purchaser in writing:

- a. Seller is the owner of the Property; and
- b. There are no other parties in possession and Purchaser shall have possession as of Closing or as otherwise agreed to herein; and
- c. There are no other known parties of interest, including leasehold interests, in the

Property except those items of record and the easements described in Section 40 below; and

d. There is no known condition existing with respect to the Property or its operation, that with Seller's actual knowledge violates any law, rule regulation, code or ruling of the local jurisdiction, the State of Colorado, the United States, or any agency or court thereof; and

e. Seller has no knowledge of any patent or latent defects, soil deficiencies, or subsurface anomalies existing on the Property; and

f. There is no pending or threatened litigation, proceeding, or investigation by any governmental authority or any other person known to Seller against or otherwise affecting the Property, nor does Seller know of any grounds for any such litigation, proceeding or investigations; and

g. To the best of the Seller's knowledge, each and every document, schedule, item, and other information delivered or to be delivered by the Seller to Purchaser or made available to Purchaser for inspection under the Agreement is complete; and

h. To the best of the Seller's knowledge, Seller has provided Purchaser with a copy of all leases or rental and all other agreements and documents not shown in the real property records relating to the Property, or to any part thereof; and

i. Seller has notified Purchaser of all improvements, real or personal, on the Property not owned by the Seller and Seller warrants to Purchaser that it is the lawful owner of all other improvements located in or on the Property and is entitled to the Purchase Price as compensation for the same; and

j. To the best of Seller's knowledge, Seller has notified Purchaser of all claims of possession not show by record, as to any part of the Property; and

k. With respect to environmental matters, except as previously disclosed herein or otherwise disclosed to Purchaser, to the best of Seller's knowledge:

(i) No part of the Property has ever been used as a landfill by Seller; and

(ii) Seller has no reason to believe or suspect and has no actual knowledge of the presence of asbestos-contaminated soils existing within the Property; and

(iii) Seller has no actual knowledge or information that the Property is or may be contaminated with any hazardous or toxic substances; and

(iv) Seller has not caused and will not cause, and to the best of the Seller's knowledge, there never has occurred, the release of any hazardous or toxic substances on the Property; and

(v) Seller has received no written or official notification that the Property is subject to any federal, state or local lien, proceedings, claim, liability or action or the threat or likelihood thereof, for the cleanup, removal, or remediation of any hazardous or toxic substances from the Property; and

(vi) Seller has no knowledge or information as to any storage tanks on or beneath the Property; and

By selling the Property, Seller does not transfer, nor is it released from, any liability for the cleanup, removal, or remediation of any hazardous or toxic substances from the Property or any liability, cost, or expense for the oversight, management, and removal of any asbestos (including asbestos-contaminated soils) or underground storage tank from the Property, to the extent such liability may exist under federal, state, or local law.

12. **PAYMENT OF ENCUMBRANCES.** Seller is responsible for paying all monetary encumbrances at or before Closing from the proceeds of this transaction or from any other source.

13. **CLOSING COSTS, DOCUMENTS AND SERVICES.** Fees for real estate closing services shall be paid at Closing by the Seller and Purchaser as follows: The Seller shall pay for (i) a standard coverage owner's policy of title insurance with deletion of standard exceptions, (ii) one-half (1/2) of all escrow fees and closing fees, and (iii) all prorated items to the date of Closing. The Purchaser shall pay for (i) all transfer taxes, state deed fees, recording fees, and documentary fees, (ii) one-half (1/2) of all escrow fees and closing fees; and (iii) any title endorsement required by Purchaser. The Purchaser and Seller shall sign and complete all customary or required documents at or before Closing.

14. **PRORATIONS.** Seller shall pay any and all taxes and special assessments accrued and owed on the Property prorated through the date of Closing. Based on the most recent levy and the most recent assessment, at or before Closing, Seller shall pay all utility, water and sewer charges, and other items related to the Property prorated through the date of Closing.

15. **TIME IS OF THE ESSENCE/REMEDIES.** Time is of the essence. All the agreements and representations set forth in the Agreement shall be binding upon and for the benefit of each party's successors and assigns. If any payment due in accordance with the Agreement is not paid, honored or tendered when due, or if any other obligation under the Agreement is not performed or waived as provided in the Agreement, there shall be the following remedies:

a. **If Purchaser Is In Default.** The Seller may elect to (i) treat the Agreement as canceled and the Parties shall thereafter be released from all obligations under the Agreement and Seller shall be entitled to retain all nonrefundable Earnest Money earned up to the point of default or (ii) treat the Agreement as being in full force and effect and seek specific performance or damages, including delay damages and attorney fees, or both, or any other legal or equitable remedy.

b. **If Seller Is In Default.** The Purchaser may elect to (i) treat the Agreement as canceled, in which case all payments and things of value received under the Agreement shall be returned and the Parties shall thereafter be released from all obligations under the Agreement or (ii) treat the Agreement as being in full force and effect and seek specific performance or damages, including delay damages and attorney fees, or both, or any other legal or equitable remedy.

16. **TERMINATION.** If the Agreement is terminated, all payments and things of value received under the Agreement shall be returned as required herein and the Parties shall be relieved of all further obligations under the Agreement.

17. **AUTHORITY TO EXECUTE.** Seller represents that the persons who have executed the Agreement have all necessary and sufficient authority to bind Seller. Purchaser represents that the persons who have executed this Agreement have all necessary and sufficient authority to bind Purchaser.

18. **COOPERATION OF THE PARTIES.** In the event that any third party brings an action against a party to the Agreement regarding the validity or operation of the Agreement, the other party will reasonably cooperate in any such litigation. Any party named in an action shall bear its own legal costs.

19. **BROKER'S FEES.** Purchaser and Seller represent and warrant to each other that except as to McLin Commercial, which is the Purchaser's broker, neither Party has employed nor engaged any brokers, consultants or real estate agents to be involved in this transaction. Seller shall pay a commission to McLin Commercial equal to \$48,000.00 at Closing.

20. **SEVERABILITY.** The promises and covenants contained in the Agreement are several in nature. Should any one or more of the provisions of the Agreement be judicially adjudged invalid or unenforceable, such judgment shall not affect, impair, or invalidate the remaining provisions of the Agreement.

21. **NO DISCRIMINATION IN EMPLOYMENT.** In connection with the performance duties under the Agreement, the Seller agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color religion, national origin, gender, age, military status, sexual orientation, gender variance, marital status, or physical or mental disability; and further agrees to insert the foregoing provision in all subcontracts relating to the Agreement.

22. **WHEN RIGHTS AND REMEDIES NOT WAIVED.** In no event shall any performance under the Agreement constitute or be construed to be a waiver by any party of any breach of covenant or condition or of any default that may then exist. The rendering of any such performance when any breach of default exists in no way impairs or prejudices any right of remedy available with respect to the breach of default. Further, no assent, expressed or implied, to any breach of any one or more covenants, provisions, or conditions of the Agreement may be deemed or taken to be a waiver or any other default or breach.

23. **SUBJECT TO LOCAL LAWS; VENUE.** The Agreement is subject to and is to be construed in accordance with the laws of the local jurisdiction and the State of Colorado, including all ordinances, rules and regulations enacted or promulgated pursuant to these state and local provisions. The aforementioned provisions are incorporated into the Agreement by this reference. Venue for any action arising out of the Agreement is in the District Court of the jurisdiction where the property is located.

24. **NOTICES.** All notices provided for herein must be in writing and be personally delivered, sent via facsimile, electronic mail, or mailed by registered or certified United States mail, postage prepaid, return-receipt requested, if to the Seller at the address first listed above and if to Purchaser at the addresses or facsimile numbers given below. Notices delivered personally or sent electronically or by facsimile are effective when sent. Notices sent by certified or registered mail are effective upon receipt. The Parties may designate substitute addresses

where or persons to whom notices are to be mailed or delivered; however, these substitutions will not become effective until actual receipt of written notification.

If to Purchaser:

Jeffrey J. Steinberg
Director of Division of Real Estate
Department of Finance
201 West Colfax Avenue, Department 1010
Denver, Colorado 80202
Email: jeffrey.steinberg@denvergov.org
Facsimile: 720-865-7585

With copies of termination and similar notices to:

Mayor
City and County of Denver
1437 Bannock Street, Room 350
Denver, Colorado 80202

and

City Attorney's Office
201 West Colfax Avenue, Dept. 1207
Denver, Colorado 80202

If to Seller:

Manoah, LLC
1400 Glenarm Place, Suite 100
Denver, Colorado 80202
Attn: Evan Makovsky
Email: emakovsky@shamesmakovsky.com
Facsimile: 303-534-1802

With a copy to:

NAI Shames Makovsky
1400 Glenarm Place, Suite 100
Denver, Colorado 80202
Attn: Jason Pomerantz, Esq.
Email: jpomerantz@shamesmakovsky.com
Facsimile: 303-534-1802

25. **PARTIES' LIABILITIES**. Each party is responsible for any and all suits, demands, costs, or action proximately resulting from its own individual acts or omissions.

26. **RIGHT TO ALTER TIME FOR PERFORMANCE**. The Parties may alter any time for performance set forth in the Agreement by a letter signed by Purchaser's Director of the Division of Real Estate and an authorized representative of Seller.

27. **AGREEMENT AS COMPLETE INTEGRATION; AMENDMENTS.** The Agreement is intended as the complete integration of all understandings between the Parties. No prior or contemporaneous addition, deletion or other amendment to the agreement will have any force or effect whatsoever, unless embodied in writing in the Agreement. Except as expressly provided for in the Agreement, no subsequent notation, renewal, addition, deletion, or other amendment to the Agreement shall have any force or effect unless embodied in a written amendatory or other agreement executed by the Parties.

28. **THIRD-PARTY BENEFICIARY.** It is the intent of the Parties that no third party beneficiary interest is created in the Agreement except for an assignment pursuant to the Agreement. The Parties are not presently aware of any actions by them or any of their authorized representatives that would form the basis for interpretation construing a different intent, and in any event expressly disclaim any such acts or actions, particularly in view of the integration of the Agreement.

29. **APPROPRIATION BY CITY COUNCIL.** All obligations of Purchaser under and pursuant to the Agreement are subject to prior appropriations of monies expressly made by Purchaser Council for the purposes of the Agreement and paid into the Treasury of Purchaser.

30. **REASONABLENESS OF CONSENT OR APPROVAL.** Whenever under the Agreement "reasonableness" is the standard for the granting or denial of the consent or approval of either party, such party shall be entitled to consider public and governmental policy, moral and ethical standards, as well as business and economic considerations.

31. **NO PERSONAL LIABILITY.** No elected official, director, officer, agent or employee of Purchaser nor any director, officer, employee, agent or personal representative of Seller shall be charged personally or held contractually liable by or to the other party under any term or provision of the Agreement or because of any breach thereof or because of its or their execution, approval or attempted execution of the Agreement.

32. **CONFLICT OF INTEREST BY CITY OFFICER.** Seller represents that to the best of Seller's information and belief no officer or employee of Purchaser is either directly or indirectly a party to or in any manner interested in the Agreement except as such interest may arise as a result of the lawful discharge of the responsibilities of such elected official or employee.

33. **MERGER.** The terms of the Agreement survive Closing and do not merge into the Deed conveying the Property.

34. **CONSTRUCTION.** The Agreement may not be interpreted in favor of or against either Seller or Purchaser merely because of their respective efforts in preparing it. The rule of strict construction does not apply to the Agreement. This instrument is subject to the following rules of construction:

a. Specific gender references are to be read as the applicable masculine, feminine, or gender neutral pronoun.

b. The words "include," "includes," and "including" are to be read as if they were followed by the phrase "without limitation."

c. "Seller" means "Sellers" when more than one person or entity is identified as an owner in the Agreement and each associated verb is to be read as singular or plural as appropriate.

d. The words "party" and "Parties" refer only to a named party to the Agreement.

e. Unless otherwise specified, any reference to a law, statute, regulation, charter or code provision, or ordinance means that statute, regulation, charter or code provision, or ordinance as amended or supplemented from time to time and any corresponding provisions of successor statutes, regulations, charter or code provisions, or ordinances.

35. **ASSIGNMENT**. The Purchaser is not obligated or liable under the Agreement to any party other than Seller named in the Agreement. Seller understands and agrees that it may not assign any of its rights, benefits, obligations, or duties under the Agreement without Purchaser's Director of the Division of Real Estate's prior written approval.

36. **PURCHASER EXECUTION OF AGREEMENT**. The Agreement is subject to, and will not become effective or binding on Purchaser until full execution by all required signatories of Purchaser.

37. **COUNTERPARTS**. The Agreement may be executed in counterparts, each of which is an original and together constitute the same document.

38. **EFFECTIVE DATE**. The effective date shall be the date set forth on Purchaser's signature page below.

39. **ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS**. Seller consents to the use of electronic signatures by Purchaser. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by Purchaser in the manner specified by Purchaser. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

40. **POLE SIGN EASEMENT**. Seller and Purchaser hereby acknowledge that Seller is obligated to grant an easement encumbering the Property to Mazel, LLC, a Colorado limited liability company (an affiliate of Seller), for purposes of constructing and maintaining a pole sign in the general vicinity of the southeast corner of the Property as well as an electrical service easement to power such pole sign that will traverse the easterly boundary of the Property. Subject to review and written approval by Purchaser, which shall not be unreasonably withheld, and the Denver Zoning Department's approval in its regulatory capacity, Purchaser hereby consents to such easements as are depicted on Exhibit D, attached hereto and incorporated herein by this reference, on the condition that such easements will not unreasonably interfere with Purchaser's use and enjoyment of the Property. Seller shall provide Purchaser with a draft of such easements prior to recordation to afford Purchaser the opportunity to make reasonable comments thereto.

IN WITNESS WHEREOF, the Parties have executed and affixed their seals, if any, at Denver, Colorado as of the Effective Date.

ATTEST:

CITY AND COUNTY OF DENVER

By: _____
DEBRA JOHNSON, Clerk and Recorder,
Ex-Officio Clerk of City and County of Denver

By: _____
MICHAEL B. HANCOCK, MAYOR
Date: _____

APPROVED AS TO FORM:

D. SCOTT MARTINEZ, City Attorney
for City and County of Denver

REGISTERED AND COUNTERSIGNED:

By: _____
Assistant City Attorney

By: _____
Manager of Finance

By: _____
Auditor

"PURCHASER"

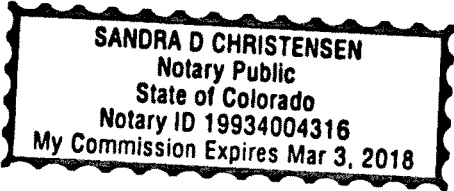
MANOAH, LLC,
a Colorado limited liability company

By: *Evan Makovsky*
Evan Makovsky, Manager

State of Colorado)
) ss
City and County of Denver)

The foregoing instrument was acknowledged before me this 25th day of November, 2014,
by Evan Makovsky as Manager of Manoah, LLC, a Colorado limited liability company.

Witness my hand and official seal.
My commission expires:



Sandra D Christensen
Notary Public

Contract Control Number:

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of

SEAL

CITY AND COUNTY OF DENVER

ATTEST:

By _____

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

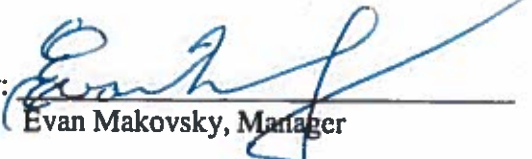
By _____

By _____

By _____



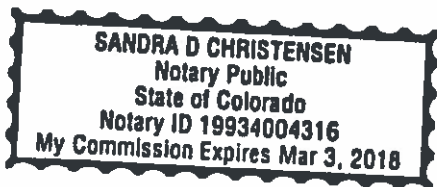
MANOAH, LLC,
a Colorado limited liability company

By: 
Evan Makovsky, Manager

State of Colorado)
) ss
City and County of Denver)

The foregoing instrument was acknowledged before me this 25th day of November, 2014,
by Evan Makovsky as Manager of Manoah, LLC, a Colorado limited liability company.

Witness my hand and official seal.
My commission expires:




Notary Public



EXHIBIT A

(Legal Description of Property)

THAT PART OF THE NORTHEAST ONE-QUARTER (NE 1/4) NORTHEAST ONE-QUARTER (NE 1/4) OF SECTION SIXTEEN (16), TOWNSHIP FOUR (4) SOUTH, RANGE SIXTY-EIGHT (68) WEST OF THE 6TH PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF SAID NORTHEAST 1/4 NORTHEAST 1/4 LOCATED 45.35 FEET EAST OF THE SOUTHWEST CORNER OF SAID NORTHEAST 1/4, NORTHEAST 1/4, BEING A POINT ON THE EAST LINE OF SOUTH LIPAN STREET, THENCE NORTHERLY ALONG SAID EAST LINE OF SOUTH LIPAN STREET A DISTANCE OF 292.82 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING NORTHERLY ALONG SAID EAST LINE OF SOUTH LIPAN STREET A DISTANCE OF 245.0 FEET; THENCE AT AN ANGLE TO THE RIGHT OF 90 DEGREES 31 MINUTES 30 SECONDS A DISTANCE OF 180.0 FEET; THENCE AT AN ANGLE TO THE RIGHT OF 70 DEGREES 23 MINUTES A DISTANCE OF 260.09 FEET; THENCE ON AN ANGLE TO THE RIGHT OF 109 DEGREES 37 MINUTES A DISTANCE OF 264.01 FEET TO THE TRUE POINT OF BEGINNING, CITY AND COUNTY OF DENVER, STATE OF COLORADO.

THAT PART OF THE NORTHEAST 1/4 NORTHEAST 1/4 OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY AND COUNTY OF DENVER, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF SAID NORTHEAST 1/4 NORTHEAST 1/4, LOCATED 45.35 FEET EAST OF THE SOUTHWEST CORNER OF SAID NORTHEAST 1/4 NORTHEAST 1/4; THENCE NORTHERLY, A DISTANCE OF 25.27 FEET TO THE POINT OF INTERSECTION OF THE EAST LINE OF SOUTH LIPAN STREET AND THE NORTH LINE OF WEST VIRGINIA AVENUE, BEING THE TRUE POINT OF BEGINNING; THENCE NORTHERLY ALONG THE EAST LINE OF SOUTH LIPAN STREET A DISTANCE OF 267.55 FEET; THENCE AT AN ANGLE TO THE RIGHT 90 DEGREES 31 MINUTES 30 SECONDS, A DISTANCE OF 264.01 FEET; THENCE AT AN ANGLE TO THE RIGHT OF 70 DEGREES 23 MINUTES, A DISTANCE OF 66.01 FEET; THENCE AT AN ANGLE TO THE RIGHT 19 DEGREES 37 MINUTES TO A POINT ON THE NORTH LINE OF WEST VIRGINIA AVENUE, WHICH IS LOCATED 60 FEET NORTH OF AS MEASURED AT RIGHT ANGLES TO THE NORTH LINE OF BLOCK 41, VALVERDE; THENCE WESTERLY ALONG THE NORTH LINE OF WEST VIRGINIA AVENUE TO THE POINT OF BEGINNING.

EXHIBIT B
(Building Improvements Exhibit)

1. Replace roof of building per specifications set forth in Exhibit B-1 attached hereto;
2. Install new fire sprinkler system in building including new water line per specifications set forth in Exhibit B-2 attached hereto;
3. Replace all rooftop units for HVAC system serving building per specifications set forth in Exhibit B-3 attached hereto; and
4. Replace all ceiling grid in building per specifications set forth in Exhibit B-4 attached hereto; and
5. Replace all ceiling tile in building per specifications set forth in Exhibit B-5 attached hereto.

Exhibit B-1

(Exhibit on Following Page)

D & D ROOFING, INC.

Phone: (303) 287-3043

Fax: (303) 287-3391

Email: info@danddroofing.com

Website: www.danddroofing.com

6270 East 50th Avenue, Commerce City, CO 80022

TRANSMITTAL LETTER

TO:	Gilbert Construction Attn: Barry Gilbert 1820 South Broadway . Denver, CO 80210	DATE:	October 24, 2014
FROM:	Chris Frey, Project Manager D & D Roofing, Inc.	JOB NO.:	12880 CF
PROJECT:	405 S. Platte River Drive	SENT VIA:	Electronic

COPIES	DESCRIPTION
1	Roofing Submittal
ACTION:	Review, approve and return one copy for our use.
REMARKS:	Contact our office if you have any questions.

DISTRIBUTION	COPIES	SPECIAL INSTRUCTIONS
Chris Frey	1	Job File



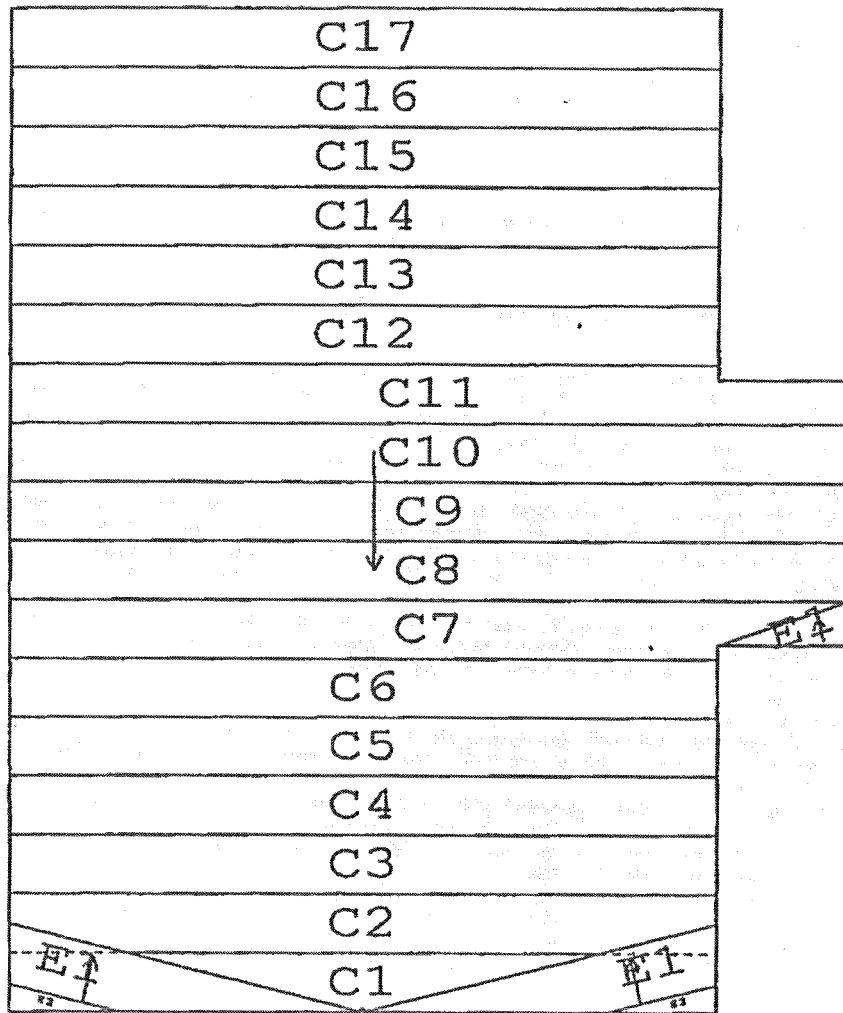
D & D ROOFING

Roofing Submittal

405 S. Platte River Drive

Denver, CO

October 24, 2014



NORTH ROOF

CARLISLE

GOLDEN SEAL TOTAL ROOFING SYSTEM WARRANTY

SERIAL NO.

DATE OF ISSUE:

BUILDING OWNER:

NAME OF BUILDING:

BUILDING ADDRESS:

DATE OF COMPLETION OF THE CARLISLE TOTAL ROOFING SYSTEM:

DATE OF ACCEPTANCE BY CARLISLE:

SAMPLE

20 Year Warranty

Carlisle Roofing Systems, Inc., warrants to the Building Owner (Owner) of the above described building, that, subject to the terms, conditions, and limitations stated in this warranty, Carlisle will repair any leak in the Carlisle Golden Seal™ Total Roofing System (Carlisle Total Roofing System) installed by a Carlisle Authorized Roofing applicator for a period of () years commencing with the date of Carlisle's acceptance of the Carlisle Total Roofing System installation. However, in no event shall Carlisle's obligations extend beyond () years subsequent to the date of substantial completion of the Carlisle Total Roofing System. See below for exact date of warranty expiration.

The Carlisle Total Roofing System is defined as the following Carlisle brand materials: Membrane, Flashings, Counterflashings, Adhesives and Sealants, Insulation, Recovery Board, Fasteners, Fastener Plates, Fastening Bars, Metal Edging, Metal Termination Bars, and any other Carlisle brand products utilized in this installation.

TERMS, CONDITIONS, LIMITATIONS

1. Owner shall provide Carlisle with written notice within thirty (30) days of the discovery of any leak in the Carlisle Total Roofing System. Owner should send written notice of a leak to Carlisle's Warranty Services Department at the address set forth at the bottom of this warranty. By so notifying Carlisle, the Owner authorizes Carlisle or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner.
2. If, upon inspection, Carlisle determines that the leak is caused by a defect in the Carlisle Total Roofing System's materials, or workmanship of the Carlisle Authorized Roofing Applicator in installing the same, Owner's remedies and Carlisle's liability shall be limited to Carlisle's repair of the leak.
3. This warranty shall not be applicable if, upon Carlisle's inspection, Carlisle determines that any of the following has occurred:
 - (a) The Carlisle Total Roofing System is damaged by natural disasters, including, but not limited to, lightning, fire, insect infestations, earthquake, tornado, hail, hurricanes, and winds of peak gust speeds of () mph or higher measured at 10 meters above ground; or
 - (b) The Carlisle Total Roofing System is damaged by any intentional or negligent acts, accidents, misuse, abuse, vandalism, civil disobedience, or the like.
 - (c) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, non-Carlisle brand metal work, etc., occurs and causes a leak, or otherwise damages the Carlisle Total Roofing System; or
 - (d) Acids, oils, harmful chemicals and the like come in contact with the Carlisle Total Roofing System and cause a leak, or otherwise damage the Carlisle Total Roofing System.
4. This Warranty shall be null and void if any of the following shall occur:
 - (a) If, after installation of the Carlisle Total Roofing System by a Carlisle Authorized Roofing Applicator there are any alterations or repairs made on or through the roof or objects such as, but not limited to, structures, fixtures, or utilities are placed upon or attached to the roof without first obtaining written authorization from Carlisle; or
 - (b) Failure by the Owner to use reasonable care in maintaining the roof, said maintenance to include, but not be limited to, those items listed on Carlisle's Care & Maintenance information sheet which accompanies this Warranty.
5. Only Carlisle brand insulation products are covered by this warranty. Carlisle specifically disclaims liability, under any theory of law, for damages sustained by or caused by non-Carlisle brand insulation products.
6. During the term of this Warranty, Carlisle shall have free access to the roof during regular business hours.
7. Carlisle shall have no obligation under this Warranty while any bills for installation, supplies, service, and warranty charges have not been paid in full to the Carlisle Authorized Roofing Applicator, Carlisle, or material suppliers.
8. Carlisle's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provision.
9. Carlisle shall not be responsible for the cleanliness or discoloration of the Carlisle Total Roofing System caused by environmental conditions including, but not limited to, dirt, pollutants, or biological agents.
10. Carlisle shall have no liability under any theory of law for any claims, repairs, restoration, or other damages including, but not limited to, consequential or incidental damages relating, directly or indirectly, to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in the building or in the air, land, or water serving the building.
11. This warranty is not assignable by operation of law or otherwise. Application may be made by a new building owner for reissuance of the warranty during the original warranty period. Certain procedures including, but not limited to, an inspection of the Roofing System by a Carlisle representative and fees will apply to any reissuance. Carlisle reserves the right, in its sole discretion, to refuse to reissue this warranty.

CARLISLE DOES NOT WARRANT PRODUCTS UTILIZED IN THIS INSTALLATION WHICH IT HAS NOT FURNISHED; AND SPECIFICALLY DISCLAIMS LIABILITY, UNDER ANY THEORY OF LAW, ARISING OUT OF THE INSTALLATION AND PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY CARLISLE.

THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR FAILURE OF THE CARLISLE TOTAL ROOFING SYSTEM OR ITS COMPONENTS. THERE ARE NO WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHICH EXTEND BEYOND THE FACE HEREOF. CARLISLE SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO THE BUILDING OR ITS CONTENTS UNDER ANY THEORY OF LAW.

Investing in Roofing Solutions for Over 45 Years

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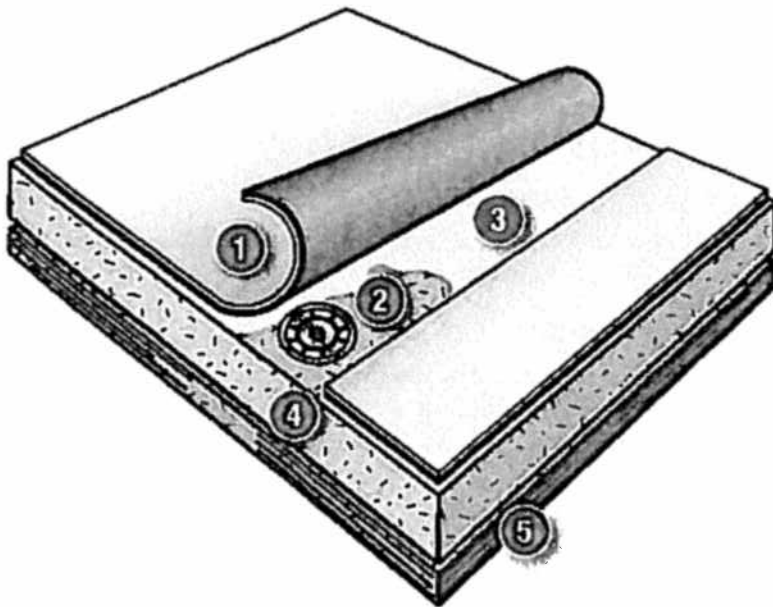
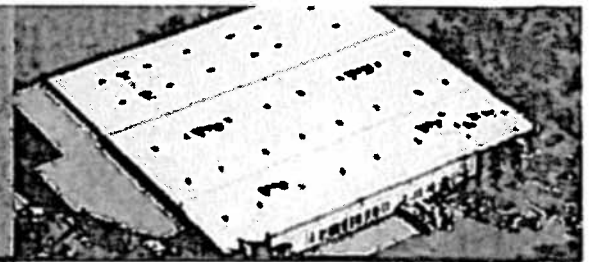
CARLISLE

Carlisle SvnTec



SURE-WELD[®]

FULLY ADHERED
ROOFING SYSTEM



TYPICAL APPLICATION

- 1 Sure-Weld Reinforced Membrane
- 2 Carlisle Insulation Fasteners and Plates
- 3 Sure-Weld Bonding Adhesive
- 4 Acceptable Insulation
- 5 Approved Roof Deck

SYSTEM FEATURES AND BENEFITS INCLUDE:

- Heat-weldable membranes
- High wind uplift performance
- High and high puncture resistance
- Top ply membrane thickness adds improved long-term weatherability and durability
- Sure-Weld white and tan membranes meet ENERGY STAR[®] guidelines

Sure-Weld Membrane for Fully Adhered Systems is available in the following:

Colors: White, Gray, Tan

Thickness (mils): 45, 60, 72 and 80

Standard Widths: 6', 8', 10' and 12'

Standard Lengths: 100'

EXISTING OR NEW DECK TYPE	NEW CONSTRUCTION						REROOFING		
	STEEL	PLYWOOD OR GSB	RAWT. CONCRETE	STRUCTURAL CONCRETE	WOOD FLANKS	GYPSUM & FERROUS CEMENT	SMOOTH SURFACED BUR	GRAVEL SURFACED BUR	EXISTING SINGLE-PLY
INSULATION REQUIRED	YES	NO	*REFER TO SPECS	NO	YES	YES	NO	YES	YES
RECOMMENDED INSULATIONS	CARLISLE POLYISO, CARLISLE HP RECOVERY BOARD OR CARLISLE POLYSTYRENE WITH AN APPROVED COVERBOARD						← REFER TO NEW CONSTRUCTION		
INSULATION ATTACHED BY	FAST ADHESIVE (NON-PENETRATING), INSULFAST OR CARLISLE HP FASTENERS						← REFER TO NEW CONSTRUCTION		
MEMBRANE ATTACHED BY	SURE-WELD BONDING ADHESIVE						← REFER TO NEW CONSTRUCTION		

FOR TEAR OFF OPTIONS REFER TO NEW CONSTRUCTION ABOVE.

For current code approvals and warranties, visit Carlisle's web site or contact a design analyst.

* Refer to Carlisle's Sure-Weld Design Criteria Portion of the Current Specification.

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Carlisle SynTec



SURE-WELD®

FULLY ADHERED
ROOFING SYSTEM

TPO Membrane

Carlisle Sure-Weld is a premium, heat-weldable, single-ply thermoplastic polyolefin (TPO) membrane, engineered to provide outstanding long-term performance in new roof construction and re-roofing applications. All Sure-Weld TPO membranes utilize the patented OctaGuard XT™ weathering package technology, which is able to withstand extreme durability testing intended to stimulate exposure to several climates.

TPO Accessories

Carlisle also offers over a dozen prefabricated, in-stock, standard-order accessories and countless custom-order accessories. All carry a CFA (Certified Fabricated Accessory) stamp of approval, so you know they are manufactured to the highest standards. Every Carlisle CFA-approved accessory saves time and money during installation.



Installation

Carlisle's Sure-Weld Fully-Adhered Roofing System utilizes white, gray or tan membranes in standard reinforced 45- or 60-mil thickness or 72- or 80-mil thick reinforced Sure-Weld EXTRA™.

Insulation, where required, is secured to an acceptable roof deck. Sure-Weld membrane sheets are fully-adhered to the insulation or substrate with Carlisle's Sure-Weld Bonding Adhesive. Adjoining sheets are hot air welded.

The above information represents a typical Carlisle Sure-Weld Fully-Adhered Roofing System. Refer to Carlisle's published specifications and details for more complete information.

Membrane and System Strengths

- Sure-Weld membrane is available in white, gray and tan; 6'-, 8'-, 10'- and 12'- widths
- Provides superior puncture and hail resistance
- Because white and tan Sure-Weld reflectivity values exceed industry standards, they both are ENERGY STAR® rated
- Puncture warranty available with 72- and 80-mil EXTRA membrane
- Membranes are eco-friendly as they do not contain chlorine or plasticizers
- Sure-Weld's top-ply surface is thicker and smoother than other membranes in the market, providing better welding results and reduced dirt pickup

System Codes

- UL Class A, B and Universal Slope ratings are available over any deck type
 - FM Uplift values up to 150 psf can be achieved
- For code specifics, refer to Carlisle's SW Code Approval Guide.

Quality Assurance

Carlisle Authorized Roofing Contractors have received training to install Carlisle's Sure-Weld Roofing Systems.

Inspection

Upon installation completion, and prior to the issuance of a membrane system warranty, an inspection will be conducted by a Carlisle Field Service Representative.

Warranty

Consult your roofing contractor or Carlisle Manufacturer's Representative/Distributor for associated warranty charges.

This system, properly installed and inspected on a commercial project may receive:

- A 10-year Total System or 15-year Golden Seal Warranty may be requested when all materials used for the roofing installation are manufactured or marketed by Carlisle
- A 10-year Reflectivity Warranty (based on ENERGY STAR criteria) available with white membrane
- A 20-year Golden Seal Warranty is available with Sure-Weld's 72- and 80-mil EXTRA TPO membranes
- Higher wind speed warranties (up to 120 mph peak gust wind speed) available upon review by Carlisle

For more specifics or for international warranty programs, contact Carlisle.



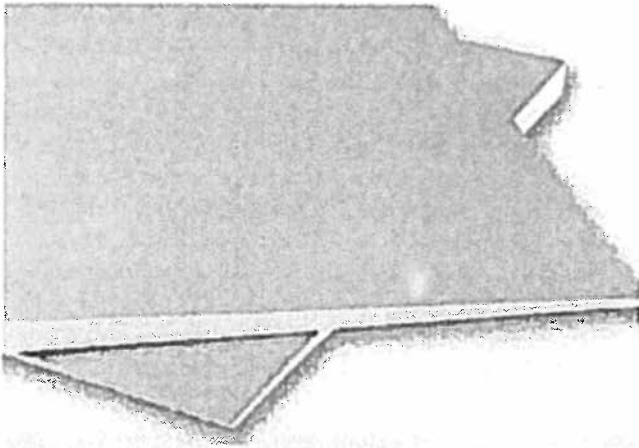
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Carlisle Syntec

CARLISLE'S HP-H TAPERED POLYISO



Product Description

HP-H Tapered is a sloped rigid roof insulation panel composed of a closed cell polyisocyanurate foam core bonded during the manufacturing process to fiber reinforced facers. HP-H Tapered systems are designed to promote positive drainage and prevent ponding water. Contact Carlisle's Tapered Systems Group for design assistance.

Features and Benefits

- HP-H tapered polyiso insulation provides the highest R-value per inch of commercially available insulation products.
- Environmentally friendly construction with 0% ozone depleting components and CFC free.
- Approved for direct application to steel decks.

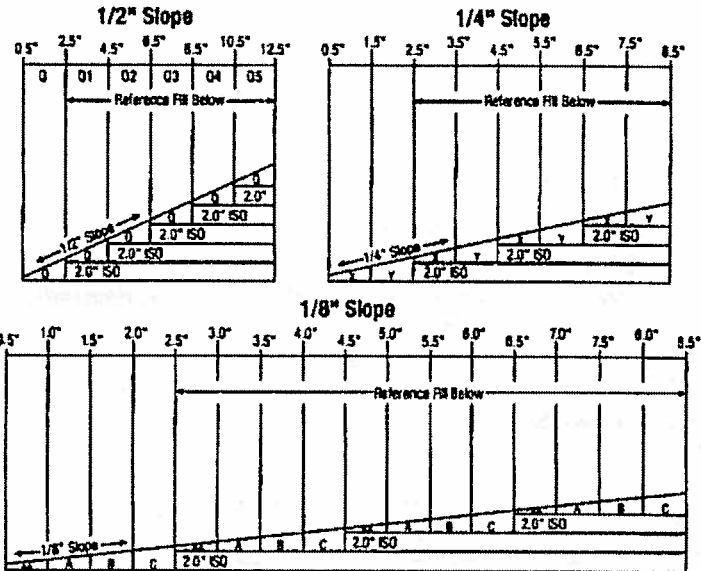
Panel Characteristics

- Available in 4' x 4' (1220 mm x 1220 mm) in thickness of 1/2" (12 mm) minimum to 4.0" (102 mm) maximum in a single layer
- Available slopes are 1/16" (2 mm), 1/8" (3 mm), 3/16" (5 mm), 1/4" (6 mm), 5/16" (10 mm) and 1/2" (12 mm) per foot
- Available in two grades of compressive strengths per ASTM C1289-06a, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)

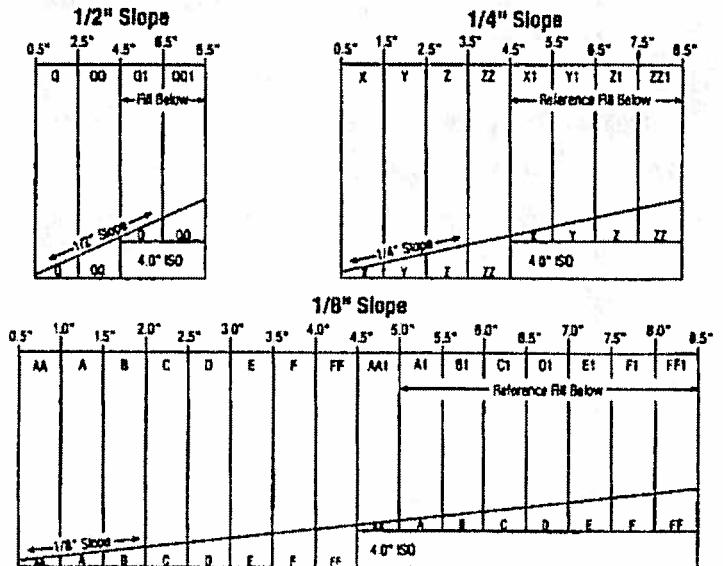
Applications

- Constructions requiring FM Class 1 and UL Class A ratings
- Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)

Standard Panel Profiles



Extended Panel Profiles



Installation

BALLASTED SINGLE-PLY SYSTEMS

Each HP-H Tapered panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

CARLISLE'S HP-H TAPERED POLYISO

MECHANICALLY ATTACHED SINGLE-PLY SYSTEMS

Each HP-H Tapered panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

FULLY ADHERED SINGLE-PLY

Each HP-H Tapered panel must be secured to the roof deck with fasteners and plates (appropriate to deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

HP-H Tapered 4' x 8' panels can be secured to the roof deck with Carlisle's FAST® Adhesive.

HP-H Tapered Codes and Compliances

- ASTM C1289-06, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- International Building Code (IBC) Section 2603

NOTE: Please be aware the Federal Specification HH-I-1972/GEN has been replaced.

Underwriters Laboratories, Inc.

- Component of Class A Roof Systems (UL 790)
- Hourly Rated P series roof assemblies (UL 263) P 225, 230, 259, 302, 303, 508, 510, 514, 519, 701, 710, 713, 717, 718, 719, 720, 722, 723, 727, 728, 729, 730, 732, 734, 735, 739, 741, 742, 743, 819, 824, 827, 828
- Insulated metal deck assemblies - (UL 1256) nos. 120, 123, 292
- HP-H Tapered classified by ULC

Factory Mutual Research

- FM Class 1 approval for steel roof-deck constructions, (FM 4450)
- FM 4470
(Subject to the conditions of approval described in Roofnav.com)
- FLORIDA BUILDING CODE APPROVAL FL#1296
- MIAMI-DADE COUNTY, FLORIDA NOA NO: 04-1018.01

Warnings and Limitations

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof covering material. Carlisle will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Carlisle for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

Polyiso Foam Core


Typical Properties and Characteristics

Property	Test Method	Value
Compressive Strength	ASTM D1621	20 psi* minimum
	ASTM 1289-05a	(138 kPa, Grade 2)
Dimensional Stability	ASTM D2128	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E96	< 1 perms
	12.10	(57.5 ng/(Pa·s·m²))
Water Absorption	ASTM C209	< 1% volume
Service Temperature		-100° to 250°F
		(-73°C to 122°C)

* Also available in 25 psi minimum, Grade 3

Other Polyiso Products by Carlisle:

- SecurShield™ – Polyiso bonded to coated glass facer
- HP-F – Polyiso bonded to foil
- HP-H – Flat polyiso
- HP-NB – Polyiso bonded to oriented strand board
- Tapered SecurShield – Tapered polyiso bonded to coated glass facer



Foamed plastic as roof deck construction material with resistance to an internal fire exposure only for use in construction no (s) 120 and 123. See UL Directory of Products Certified for Canada and UL Roofing Materials and Systems Directory, 990L.



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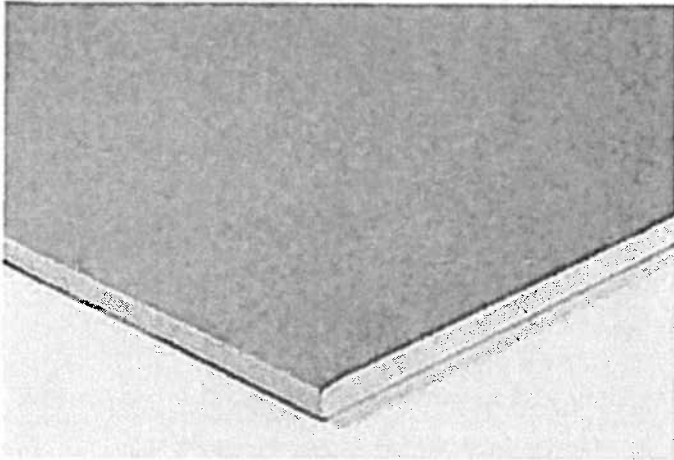
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REPRINT CODE: 603258 • "HP-H Tapered Polyiso Product Data Sheet" – 03/11 © 2011 Carlisle.



Carlisle SunTec

HP-H Polyiso



Overview

HP-H is a rigid-roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to fiber-reinforced paper facers.

Features and Benefits

- » HP-H polyiso insulation provides the highest R-value per inch of commercially available insulation products
- » Environmentally friendly construction with 0% ozone-depleting components and CFC free
- » Approved for direct application to steel decks

Panel Characteristics

- » Available in 4' x 4' (1220 mm x 1220 mm) and 4' x 8' (1220 mm x 2440 mm) panels in thickness of 1" (25 mm) to 4.5" (115 mm)
- » Available in two grades of compressive strengths per ASTM C1289-11, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)

Applications

- » Constructions requiring FM Class 1 and UL Class A ratings
- » Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)

HP-H Polyiso Thermal Values

Thickness (Inches)	Thickness (MM)	LTTR R-value**	Flute Spanability
1.00	25	5.6	2 3/4"
1.50	38	8.6	4 3/4"
1.80	46	10.2	4 3/4"
2.00	51	11.4	4 3/4"
2.50	64	14.4	4 3/4"
2.60	66	15.0	4 3/4"
3.00	76	17.4	4 3/4"
3.50	89	20.5	4 3/4"
3.80	97	22.3	4 3/4"
4.00	102	23.6	4 3/4"
4.30	109	25.5	4 3/4"
4.50	114	26.8	4 3/4"

**Long-Term Thermal Resistance Values are based on ASTM C1289-11 effective January 1, 2014, predicting product R-value after five years, which is equivalent to a time-weighted thermal design R-value for 15 years.

Installation

Ballasted Single-Ply Systems

Each HP-H panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

Mechanically Attached Single-Ply Systems

Each HP-H panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

Fully Adhered Single-Ply Systems

Each HP-H panel must be secured to the roof deck with fasteners and plates (appropriate to deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

HP-H 4' x 8' panels can be secured to the roof deck with Carlisle's FAST® Adhesive, either full coverage or bead spacing of no less than 6" on center.

HP-H 4' x 4' panels may be adhered to prepared concrete deck with a full mopping of Type III or IV asphalt.

Review Carlisle specifications and details for complete installation information.

HP-H Polyiso

HP-H Codes and Compliances

- › ASTM C1289-11, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- › International Building Code (IBC) Section 2603

NOTE: Please be aware the Federal Specification HH-I-1972/GEN has been replaced.

Underwriters Laboratories, Inc.

- › Component of Class A Roof Systems (UL 790)
- › Hourly Rated P series roof assemblies (UL 263) P 225, 230, 259, 302, 303, 508, 510, 514, 519, 701, 710, 713, 717, 718, 719, 720, 722, 723, 727, 728, 729, 730, 732, 734, 735, 739, 741, 742, 743, 819, 824, 827, 828
- › Insulated metal deck assemblies - (UL 1256) nos. 120, 123, 292
- › HP-H classified by ULC
- › R18846

Factory Mutual Research

- › FM Class 1 approval for steel roof-deck constructions, (FM 4450)
- › FM 4470
(Subject to the conditions of approval described in Roofnav.com)
- › FLORIDA BUILDING CODE APPROVAL FL#1296
- › MIAMI-DADE COUNTY, FLORIDA NOA NO: 04-1018.01

Precautions

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof-covering material. Protect installed product from excessive foot traffic. Carlisle will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Carlisle for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

Typical Properties and Characteristics

Physical Property	Test Method	Value
Compressive Strength	ASTM D1621 ASTM 1289	20 psi* minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D2128	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E96 12.10	<1 perm (57.5 ng/(Pa·s·m ²))
Water Absorption	ASTM C209	<1% volume
Service Temperature		-100°F to 250°F (-73°C to 122°C)

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

* Polyiso Foam Core only

Other Polyiso Products by Carlisle

- › Tapered HP-H – Polyiso bonded to fiber-reinforced paper facers
- › Flat and Tapered SecurShield – Polyiso bonded to coated glass facers
- › SecurShield CD – 1" Class A Polyiso on a combustible deck
- › HP-NB – Polyiso bonded to Oriented Strand Board
- › HP-F – Polyiso bonded to foil
- › SecurShield HD Composite
- › SecurShield HD – ½" Polyiso coverboard, 100 psi
- › SecurShield HD Plus – ½" Polyiso coverboard, 100 psi – FM 1-90 with reduced fastening

Foamed plastic as roof deck construction material with resistance to an internal fire exposure only for use in construction no. (s) 120 and 123. See UL Directory of Products Certified for Canada and UL Roofing Materials and Systems Directory, 990L.



CARLISLE SURE-SEAL® HP RECOVERY BOARD

GENERAL:

Carlisle HP Recovery Board is a rigid insulating and recovery board. It is available in either 1/2 inch (13 mm) or 1 inch (25 mm) thickness. This dimensionally stable, durable insulation is compatible with all Carlisle Single-Ply Roofing Systems. It can be used as a separator layer over an existing roof system or as an insulation overlayment. Carlisle HP Recovery Board is UL and FM approved as a system component in certain Carlisle roofing assemblies. Please review the current Carlisle Design and Application Specifications for the appropriate use under a Carlisle Roofing System.

TYPICAL PROPERTIES AND CHARACTERISTICS:

Property	ASTM Test Method	Thickness / Value	
		1/2 Inch Thickness	1 Inch Thickness
Linear Expansion (% , max.)	C 209	0.5	0.5
Tensile Strength	C 209		
Parallel (psi, min.)		150	150
Perpendicular (psf, min.)		600	600
Thermal Conductivity	C 518		
K Factor		0.4	0.4
R Value		1.25	2.50
Transverse Strength	C 209		
Either Direction (lbf, min.)		12	24
Water Absorption (% volume, max.)	C 209	7.0	7.0
Weight (lb/ ft ²)		0.65	1.2

Carlisle HP Recovery Board meets or exceeds ASTM C 208 for Grade 2 Roof Insulation Board.

CAUTIONS AND WARNINGS:

- Material should be stored in a dry area.
- Do not install more HP Recovery Board than can be covered by membrane during the same day.

INSTALLATION:

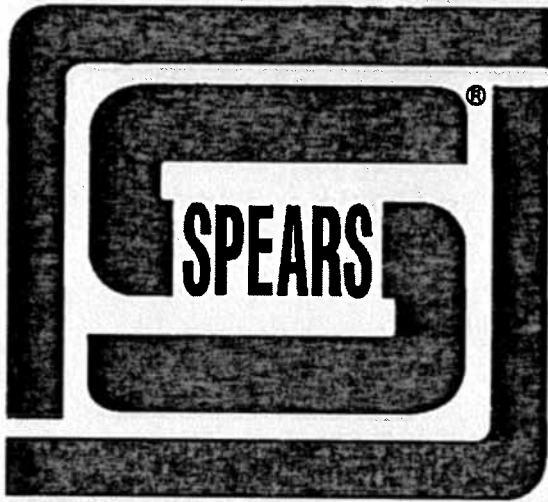
- Sure-Seal HP Recovery Board must be installed with the coated side up.
- All insulation boards must be butted together with no gaps greater than 1/4" (6 mm). Gaps greater than 1/4" (6 mm) must be filled with the same material.

Carlisle and Sure-Seal are trademarks of The Carlisle Corporation.

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Exhibit B-2

(Exhibit on Following Page)



FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS



TECHNICAL INFORMATION WEIGHTS & DIMENSIONS

February 14, 2006

SUPERSEDES ALL PREVIOUS EDITIONS



Quality Systems Certificate No. 293
Corporate Facilities, Sylmar, CA
Assessed to ISO 9001

Visit our web site:
www.spearsmfg.com

FG-4-0206



FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

The information contained in this publication is based on current information and Product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department (West Coast: (818) 364-1611—East Coast: (717) 938-9006).

General Information

RECOMMENDATIONS FOR INSTALLERS AND USERS:

Plastic piping systems should be ENGINEERED, INSTALLED and OPERATED in accordance with ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES for plastic piping systems. Suitability for the intended service application should be determined by the installer and/or user prior to installation of a plastic piping system. All installation and maintenance personnel should be trained in the proper handling and installation requirements and precautions of plastic piping systems. **PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Consult all applicable codes and regulations for compliance prior to installation.**

Installation must be made in accordance with
SPEARS® MANUFACTURING COMPANY
FIRE SPRINKLER PIPING PRODUCTS
 Installation Instructions - FG-3

NOTE — Individual or group instruction in correct solvent welding procedures is available by contacting your local distributor or your servicing Spears® Regional Distribution Center.

SOLVENT CEMENT CONNECTIONS — Spears® Manufacturing Company recommends the use of Spears® Two Step FS-1 primer with FS-3 solvent cement OR Spears® FS-5 One Step solvent cement for joining Spears® products. Use of solvent cementing products not approved for CPVC fire sprinkler systems, or failure to follow installation instructions will automatically void the warranty.

THREADED CONNECTION — Spears® Manufacturing Company recommends the use of Spears® BLUE 75™ Thread Sealant. This product has been tested by Spears® and the sealant manufacturer for compatibility with the Spears® CPVC fire sprinkler products. Consult the sprinkler head manufacturer before using this product. **WARNING: OTHER PIPE JOINT COMPOUNDS OR PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING IN THE CPVC OR OTHER FITTING COMPONENTS.** Care must be taken to avoid overtorquing - generally 1 to 2 turns beyond finger tight is all that is required to make up a threaded connection. Factory testing has indicated 10-25 ft. lbs. of torque is adequate to obtain a leak free seal.

NOT FOR USE WITH COMPRESSED AIR OR GASES

WARNING: DO NOT USE COMPRESSED AIR OR GAS TO TEST ANY PVC OR CPVC THERMOPLASTIC PIPING PRODUCT OR SYSTEM, AND DO NOT USE DEVICES PROPELLED BY COMPRESSED AIR OR GAS TO CLEAR SYSTEMS. THESE PRACTICES MAY RESULT IN EXPLOSIVE FRAGMENTATION OF SYSTEM PIPING AND COMPONENTS CAUSING SERIOUS OR FATAL BODILY INJURY.

Dimension Reference

- | | |
|--|--|
| <p>G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/32 inch.</p> <p>H = Intersection of center lines to face of fitting; 90° elbows tees, crosses; ± 1/32 inch.</p> <p>J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/32 inch</p> <p>L = Overall length of fittings; ± 1/16 inch.</p> | <p>M = Outside diameter of socket/thread hub; ± 1/16 inch.</p> <p>N = Socket bottom to socket bottom; couplings; ± 1/16 inch.</p> <p>Q = Width of flats; ± 1/16 inch.</p> <p>W = Height of cap; ± 1/16 inch.</p> |
|--|--|

CPVC FIRE SPRINKLER PIPE SDR. 13.5 (ASTM F 442)							
Part Number	Nominal Size		Average O.D.		Average I.D.		Approx. Weight Lbs./Ft.
	Inches	(mm)	Inches	(mm)	Inches	(mm)	
CP-007	3/4	(19.1)	1.050	(26.7)	.874	(22.5)	.181
CP-010	1	(25.4)	1.315	(33.4)	1.101	(28.2)	.280
CP-012	1-1/4	(31.8)	1.660	(42.2)	1.394	(35.6)	.418
CP-015	1-1/2	(38.1)	1.900	(48.3)	1.598	(40.7)	.550
CP-020	2	(50.8)	2.375	(60.3)	2.003	(50.9)	.872
CP-025	2-1/2	(63.5)	2.875	(73.0)	2.423	(61.5)	1.260
CP-030	3	(76.2)	3.500	(88.9)	2.950	(75.0)	1.900

Exhibit B-2

(Exhibit on Following Page)

Reliable®

Model F1FR Series Quick Response Standard Spray

Model F1FR56 Sprinkler Types

Standard Upright
Standard Pendent
Conventional
Vertical Sidewall
Horizontal Sidewall

Model F1FR56 Recessed Sprinkler Types

Standard Pendent/F1/F2/FP
Horizontal Sidewall

Model F1FR56 Concealed Sprinkler Types

Standard Pendent

Model F1FR42, F1FRXLH & F1FR28 Sprinkler Types

Standard Upright
Standard Pendent

Model F1FR42, F1FRXLH & F1FR28 Recessed Sprinkler Types

Standard Pendent

Model F1FR56LL & F1FR42LL Low Lead Sprinkler Types*

Standard Pendent
Less than 0.25% Lead Content

Listing & Approvals

1. Underwriters Laboratories Inc. and Certified for Canada (cULus).
2. Factory Mutual Approvals (FM)
3. Loss Prevention Council (LPCB, UK)
4. VdS Schadenverhütung GmbH
5. *NSF Certified to NSF/ANSI Standard 61 Annex G

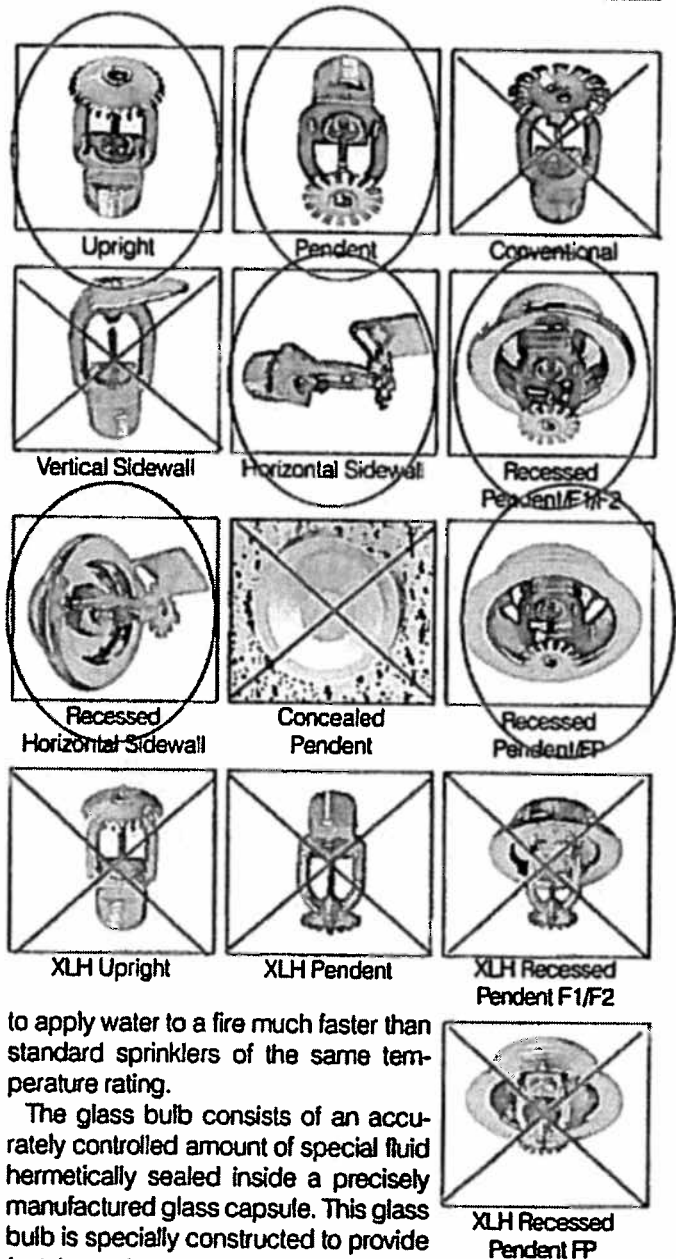
UL Listing Category

Sprinklers, Automatic & Open (VNIV)
Quick Response Sprinkler

Product Description

Reliable Models F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH & F1FR28 Series Sprinklers are quick response sprinklers which combine the durability of a standard sprinkler with the attractive low profile of a decorative sprinkler.

The Models F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH & F1FR28 Series Recessed automatic sprinklers utilize a 3.0 mm frangible glass bulb. These sprinklers have demonstrated response times in laboratory tests which are five to ten times faster than standard response sprinklers. This quick response enables the Model F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH & F1FR28 Series sprinklers



to apply water to a fire much faster than standard sprinklers of the same temperature rating.

The glass bulb consists of an accurately controlled amount of special fluid hermetically sealed inside a precisely manufactured glass capsule. This glass bulb is specially constructed to provide fast thermal response.

At normal temperatures, the glass bulb contains the fluid in both the liquid and vapor phases. The vapor phase can be seen as a small bubble. As heat is applied, the liquid expands, forcing the bubble smaller and smaller as the liquid pressure increases. Continued heating forces the liquid to push out against the bulb, causing the glass to shatter, opening the waterway and allowing the deflector to distribute the discharging water.

Model F1FR56, F1FR42, F1FRXLH & F1FR28 Quick Response Recessed Pendent Sprinkler⁽¹⁾

Installation Wrench: Model GFR2 Sprinkler Wrench

Installation Data:

Nominal Orifice	Thread Size	K Factor		Sprinkler Height	Sprinkler Identification Number (SIN)
		US	Metric		
1/2" (15mm)	1/2" NPT(R1/2)	5.6	80	2.25" (57mm)	RA1414
7/16" (10mm)	1/2" NPT (R1/2)	4.2	60	2.25" (57mm)	RA1413
3/8" (10mm)	1/2" NPT (R1/2)	2.8	40	2.25" (57mm)	RA1411

⁽¹⁾ Refer to escutcheon data table for approvals & dimensions

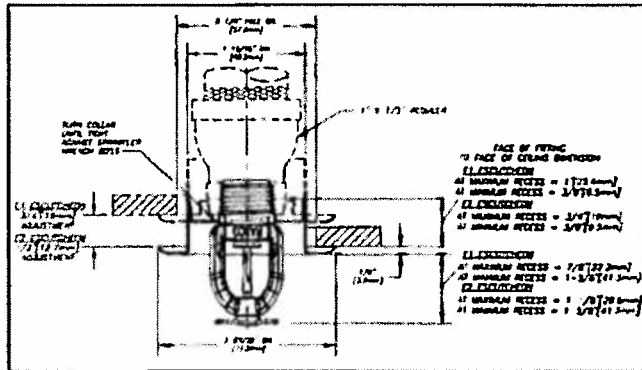
Model F1FR56LL & F1FR42LL Quick Response Recessed Pendent Sprinkler⁽¹⁾

Installation Wrench: Model GFR2 Sprinkler Wrench

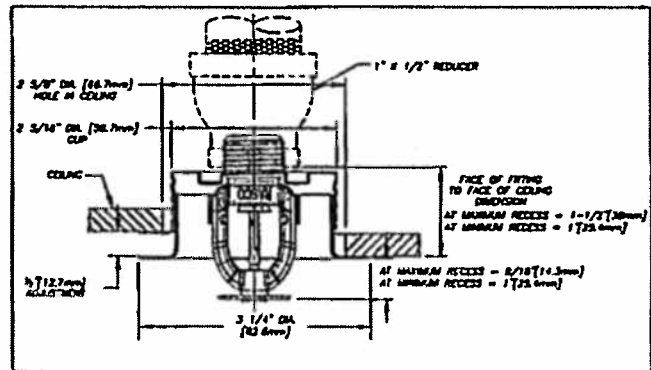
Installation Data:

Nominal Orifice	Thread Size	K Factor		Sprinkler Height	Sprinkler Identification Number (SIN)
		US	Metric		
1/2" (15mm)	1/2" NPT(R1/2)	5.6	80	2.25" (57mm)	RA1415
7/16" (10mm)	1/2" NPT (R1/2)	4.2	60	2.25" (57mm)	RA1416

⁽¹⁾ Refer to escutcheon data table for approvals & dimensions



Model F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH & F1FR28 F1 or F2



Model F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH & F1FR28 FP

Model F1FR56 Quick Response Vertical Sidewall Sprinkler

Installation Wrench: Model D Sprinkler Wrench

Installation Position: Upright or Pendent

Approval Type: Light Hazard Occupancy

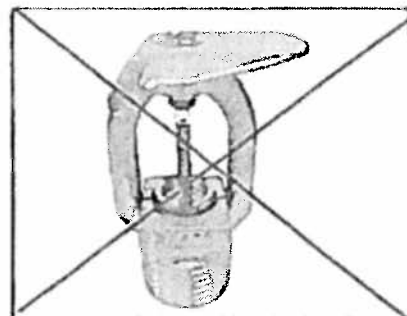
Installation Data:

Nominal Orifice	Thread Size	Nominal K Factor		Sprinkler Height	Approval Organizations	Sprinkler Identification Numbers (SIN)
		US	Metric			
1/2" (15mm)	1/2" NPT (R1/2)	5.6	80	2.25" (57mm)	1,2,3	RA1485 ⁽¹⁾
15mm	1/2" NPT (R1/2)	5.6	80	2.25" (57mm)	3 ⁽¹⁾	

⁽¹⁾ LPC Approval is for pendent position only.

⁽²⁾ cULus Listed corrosion resistant (Polyester coated) sprinkler.

⁽³⁾ Electroless Nickel PTFE (Teflon[®]) Plated - cULus listed Corrosion Resistant



Vertical Sidewall

Sprinkler Type	Deflector to Ceiling Distance (Min. - Max.)
Upright	4" (102mm) - 12" (305mm)
Pendent	4" (102mm) - 12" (305mm)

*DuPont Registered Trademark

Temperature Ratings

Classification	Sprinkler Temperature		Max. Ambient Temp.	Bulb Color
	°C	°F		
Ordinary	57	135	100°F (38°C)	Orange
Ordinary	68	155	100°F (38°C)	Red
Intermediate	79	175	150°F (66°C)	Yellow
Intermediate	93	200	150°F (66°C)	Green
High ⁽¹⁾	141	286	225°F (107°C)	Blue

⁽¹⁾ Not available for recessed sprinklers.

Escutcheon Data ⁽¹⁾

⁽¹⁾ SIN RA1435 – cULus permits use with F1, F2 or FP escutcheons for "light hazard" only, while FM limits use for same hazard with F2 escutcheon only.

Maintenance

The Model F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH and Model F1FR56, F1FR56LL, F1FR42, F1FR42LL, F1FRXLH & F1FR28 Recessed Sprinklers should be inspected and the sprinkler system maintained in accordance with NFPA 25. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluids. Remove dust by using a soft brush or gentle vacuuming. Remove any sprinkler which has been painted (other than factory applied) or damaged in any way. A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Prior to installation, sprinklers should be maintained in the original cartons and packaging to minimize the potential for damage to sprinklers that would cause improper operation or non-operation.

Sprinkler Types

Standard Upright
 Standard Pendent
 Conventional
 Recessed Pendent
 Vertical Sidewall
 Horizontal Sidewall
 Recessed Horizontal sidewall
 Concealed pendent

Maximum Working Pressure

175 psi (12 bar)
 100% Factory tested hydrostatically to 500 psi (34.5 bar)

Finishes ⁽¹⁾

Standard Finishes		
Sprinkler	Escutcheon	Cover plate ⁽¹⁾
Bronze	Brass	Chrome
Chrome Plated	Chrome	White
Polyester	Plated	
Coated ⁽⁴⁾⁽⁵⁾⁽⁶⁾	White Painted	
Special Application Finishes		
Sprinkler	Escutcheon	Cover plate ⁽¹⁾
Electroless Nickel PTFE (Teflon [®]) ⁽⁷⁾	Electroless Nickel PTFE (Teflon [®]) [*]	Bright Brass
Bright Brass ⁽³⁾	Bright Brass	Black Plating
Black Plated	Black Plated	Black Paint
Black Paint ⁽²⁾⁽⁸⁾	Black Paint	Off White
Off White ⁽²⁾⁽⁵⁾	Off White	Satin Chrome
Chrome Dull	Chrome Dull	

⁽¹⁾ Other finishes and colors are available on special order. Consult the factory for details. Custom color painted sprinklers may not retain their UL Corrosion resistance listing. Coverplate custom paint is semi-gloss, unless specified otherwise.

⁽²⁾ cULus Listed only.

⁽³⁾ 200°F (93°C) maximum.

⁽⁴⁾ cULus listed "corrosion resistance" applies to SIN Numbers RA1435 (HSW), RA1485(VSW), RA1425 (Upright), RA1414 (Pendent) and RA1415 (Pendent) in standard black or white. Corrosion resistance in other polyester colors is available upon request.

⁽⁵⁾ FM Approvals finish as "Polyester coated" applies to SIN Number RA1414, RA1435 and RA1425 in standard black or white.

⁽⁶⁾ LPCB and VdS Approved finish applies only to RA1425, RA1414 and RA1475.

⁽⁷⁾ cULus listed Corrosion Resistant

Ordering Information

Specify:

1. Sprinkler Model
2. Sprinkler Type
3. Orifice Size
4. Deflector Type
5. Temperature Rating
6. Sprinkler Finish
7. Escutcheon Type
8. Escutcheon Finish (where applicable)
9. Cover plate Model
10. Cover plate Thread size
11. Cover plate Temperature
12. Cover plate Adjustment
13. Cover plate Finish

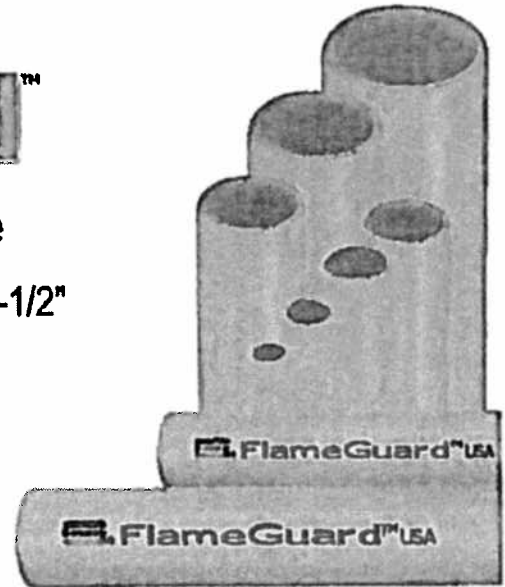
Note: When Model F1FR56 Recessed sprinklers are ordered the sprinklers and escutcheons are packaged separately.



NEW PRODUCTS

FG-1D-0910

Look to Spears® for All Your CPVC Fire Sprinkler Product Needs – Pipe, Fittings & Solvent Cement



CPVC Fire Sprinkler Pipe

- Complete Size Range: 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2" and 3" SDR 13.5 CPVC Fire Sprinkler Pipe
- UL® Listed For U.S. and Canada
- UL®, FM® Approved and NSF® Certified
- Fully Compatible with Other Brands of CPVC Fire Sprinkler Pipe & Fittings

Pipe

SDR 13.5, 10' and 15' Lengths, Price Per Foot

Packaging is in feet per bag

Part Number		Size	Std Pk	Mstr Ctn	Disc Code	Price Each
10 Foot Length	15 Foot Length					
CP-007-10	CP-007	3/4	390	0	071	1.69
CP-010-10	CP-010	1	255	0	071	2.61
CP-012-10	CP-012	1-1/4	135	0	071	4.09
CP-015-10	CP-015	1-1/2	105	0	071	5.65
CP-020-10	CP-020	2	75	0	071	8.45
CP-025-10	CP-025	2-1/2	60	0	071	12.90
CP-030-10	CP-030	3	45	0	071	19.60

NOT FOR USE WITH COMPRESSED AIR OR GAS

Prices subject to change without notice. Possession of this price schedule shall not be construed as an offer to sell the products listed. Product drawing(s) & photo(s) are representative and may not fully reflect product configuration.

Progressive Products From Spears® Innovation & Technology



SPEARS® MANUFACTURING COMPANY

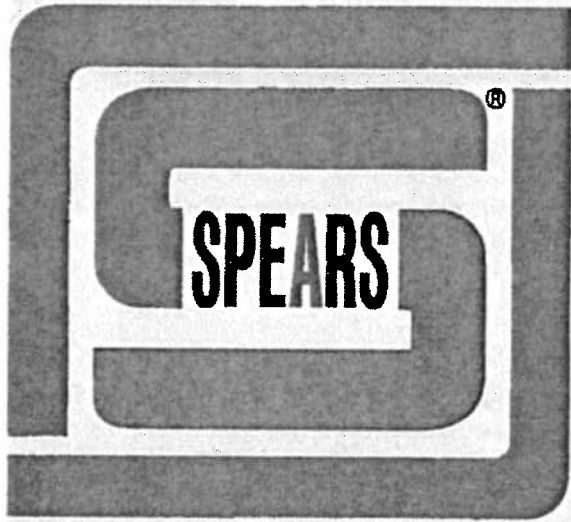
Corporate Office

15853 Olden Street • Sylmar, CA 91342

PO Box 9203 • Sylmar, CA 91392

(818) 364-1611 • <http://www.spearsmfg.com>





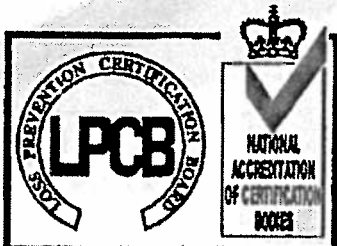
FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS



TECHNICAL INFORMATION WEIGHTS & DIMENSIONS

February 14, 2006

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Corporate Facilities, Sylmar, CA
Assessed to ISO 9001

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FG-4-0206



FlameGuard™ CPVC FIRE SPRINKLER PIPING PRODUCTS

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SPEARS® MANUFACTURING COMPANY
FIRE SPRINKLER PIPING PRODUCTS
 Installation Instructions - FG-3

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- J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/32 inch
- L = Overall length of fittings; ± 1/16 inch.
- M = Outside diameter of socket/thread hub; ± 1/16 inch.
- N = Socket bottom to socket bottom; couplings; ± 1/16 inch.
- Q = Width of flats; ± 1/16 inch.
- W = Height of cap; ± 1/16 inch.

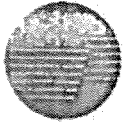
CPVC FIRE SPRINKLER PIPE SDR. 13.5 (ASTM F 442)							
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CP-030	3	(76.2)	3.500	(88.9)	2.950	(75.0)	1.900

Exhibit B-3

(Exhibit on Following Page)

Exhibit B-3

(Exhibit on Following Page)



TRANE

Submittal

Prepared For:
All Bidders

Date: October 24, 2014

Customer P.O. Number:
Customer Project Number:

Sold To:

Job Number:
Job Name:
405 South Platte River Drive

Trane U.S. Inc. dba Trane is pleased to provide the enclosed submittal for your review and approval.

Product Summary

Qty	Product
5	3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
6	UPG Accessories

The attached information describes the equipment we propose to furnish for this project, and is submitted for your approval.

Cheryl Sykes
Trane
445 Bryant St., Suite 5
Denver, CO 80204-4800
Phone: (303) 228-3300
Cell:
Fax: (303) 228-2828

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 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop..... 28

 UPG Accessories..... 28

Tag Data - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop (Qty: 5)

Item	Tag(s)	Qty	Description	Model Number
A1	Carrier	2	3-10 Ton R410A PKGD Unitary Gas/Electric	YSC120F3EHA--D001000000A000000000000000
A2	Carrier	1	3-10 Ton R410A PKGD Unitary Gas/Electric	YSC120F3EHA--C001000000A000000000000000
A3	Bryant	1	3-10 Ton R410A PKGD Unitary Gas/Electric	YSC090F3EHA--0001000000A000000000000000
A4	Fedders	1	3-10 Ton R410A PKGD Unitary Gas/Electric	YSC060E3EHA--D0010000000000000000000000

Product Data - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop**All Units**

DX cooling, gas heat
 Standard efficiency
 Convertible configuration
 Major design sequence
 208-230/60/3
 Electro mechanical controls 3ph
 High gas heat 3ph
 Standard condenser coil w/hail guard

Item: A1 Qty: 2 Tag(s): Carrier

10 Ton
 Economizer Dry Bulb 0-100% with Barometric Relief
 Return air smoke detector 3ph
 Adapter Curbs (Fld)

Item: A2 Qty: 1 Tag(s): Carrier

10 Ton
 Economizer Dry Bulb 0-100%
 Return air smoke detector 3ph
 Power exhaust (Fld)
 Power Exhaust Limit Switch (Fld)
 Adapter Curbs (Fld)

Item: A3 Qty: 1 Tag(s): Bryant

7.5 Ton Single compressor
 Return air smoke detector 3ph

Item: A4 Qty: 1 Tag(s): Fedders

5 Ton
 Economizer Dry Bulb 0-100% with Barometric Relief
 Adapter Curb (Fld)

Mechanical Specifications - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop**Item: A1 - A4 Qty: 5 Tag(s): Carrier, Bryant, Fedders****General**

The units shall be convertible airflow. The operating range shall be between 115°F and 0°F in cooling as standard from the factory for units with microprocessor controls. Operating range for units with electromechanical controls shall be between 115°F and 40°F. Cooling performance shall be rated in accordance with ARI testing procedures. All units shall be factory assembled, internally wired, fully charged with R-410A, and 100 percent run tested to check cooling operation, fan and blower rotation, and control sequence before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. Units shall be cULus listed and labeled, classified in accordance for Central Cooling Air Conditioners.

Casing

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 672 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. Service panels shall have lifting handles and be removed and reinstalled by removing two fasteners while providing a water and air tight seal. All exposed vertical panels and top covers in the indoor air section shall be insulated with a cleanable foil-faced, fire-retardant permanent, odorless glass fiber material. The base of the unit shall be insulated with 1/8 inch, foil-faced, closed-cell insulation. All insulation edges shall be either captured or sealed. The unit's base pan shall have no penetrations within the perimeter of the curb other than the raised 1 1/8 inch high downflow supply/return openings to provide an added water integrity precaution, if the condensate drain backs up. The base of the unit shall have provisions for forklift and crane lifting, with forklift capabilities on three sides of the unit.

Unit Top

The top cover shall be one piece construction or, where seams exist, it shall be double-hemmed and gasket-sealed. The ribbed top adds extra strength and enhances water removal from unit top.

Filters

Throwaway filters shall be standard on all units. Optional 2-inch MERV 8 and MERV 13 filters shall also be available.

Compressors

All units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads shall be provided with the scroll compressors.

Dual compressors are outstanding for humidity control, light load cooling conditions and system back-up applications. Dual compressors are available on 7½-10 ton models and allow for efficient cooling utilizing 3-stages of compressor operation for all high efficiency models.

Notes:

Crankcase heaters are optional on YSC (036, 048, 060, 072, 090, 102, 120); standard on YHC (036, 048, 060, 072, 092, 102, 120).

Indoor Fan

The following units shall be equipped with a direct drive plenum fan design (T/YSC120E, T/YHC092, 102, 120E). Plenum fan design shall include a backward-curved fan wheel along with an external rotor direct drive variable speed indoor motor. All plenum fan designs will have a variable speed adjustment potentiometer located in the control box. 3-5 ton units (standard efficiency 3-phase or high efficiency 3-phase with optional motor) are belt driven, FC centrifugal fans with adjustable motor sheaves. 3-5 ton units (1-phase or high efficiency 3-phase) have multispeed, direct drive motors. All 6-8½ ton units (standard efficiency) shall have belt drive motors with an adjustable idler-arm assembly for quick-adjustment to fan belts and motor sheaves. All motors shall be thermally protected. All 10 tons and 7½-8½ (high efficiency) have variable speed direct drive motors. All indoor fan motors meet the U.S. Energy Policy Act of 1992 (EPACT).

Outdoor Fans

The outdoor fan shall be direct-drive, statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor shall be permanently lubricated and shall have built-in thermal overload protection.

Evaporator and Condenser Coils

Internally finned, 5/16" copper tubes mechanically bonded to a configured aluminum plate fin shall be standard. The microchannel type condenser coil is standard for the T/YSC 10 ton models and 7½ ton high efficiency models. The microchannel type condenser coil is not offered on the 7½ ton dehumidification model. Due to flat streamlined tubes with

small ports, and metallurgical tube-to-fin bond, microchannel coil has better heat transfer performance. Microchannel condenser coil can reduce system refrigerant charge by up to 50% because of smaller internal volume, which leads to better compressor reliability. Compact all-aluminum microchannel coils also help to reduce the unit weight. All-aluminum construction improves re-cyclability. Galvanic corrosion is also minimized due to all aluminum construction. Strong aluminum brazed structure provides better fin protection. In addition, flat streamlined tubes also make microchannel coils more dust resistant and easier to clean. Coils shall be leak tested at the factory to ensure the pressure integrity. The evaporator coil and condenser coil shall be leak tested to 600 psig. The assembled unit shall be leak tested to 465 psig. The condenser coil shall have a patent pending 1+1+1 hybrid coil designed with slight gaps for ease of cleaning. A removable, reversible, double-sloped condensate drain pan with through the base condensate drain is standard.

Tool-less Hall Guards

Tool-less, hail protection quality coil guards are available for condenser coil protection.

Controls

Unit shall be completely factory-wired with necessary controls and contactor pressure lugs or terminal block for power wiring. Unit shall provide an external location for mounting a fused disconnect device. A choice of microprocessor or electromechanical controls shall be available. Microprocessor controls provide for all 24V control functions. The resident control algorithms shall make all heating, cooling, and/or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures. The control algorithm maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized microprocessor shall provide anti-short cycle timing and time delay between compressors to provide a higher level of machine protection. 24-volt electromechanical control circuit shall include control transformer and contactor

High Pressure Control

All units include High Pressure Cutout as standard.

Phase monitor

Phase monitor shall provide 100% protection for motors and compressors against problems caused by phase loss, phase imbalance, and phase reversal. Phase monitor is equipped with an LED that provides an ON or FAULT indicator. There are no field adjustments. The module will automatically reset from a fault condition.

Refrigerant Circuits

Each refrigerant circuit offer thermal expansion valve as standard. Service pressure ports, and refrigerant line filter driers are factory-installed as standard. An area shall be provided for replacement suction line driers.

Gas Heating Section

The heating section shall have a progressive tubular heat exchanger design using stainless steel burners and corrosion resistant steel throughout. An induced draft combustion blower shall be used to pull the combustion products through the firing tubes. The heater shall use a direct spark ignition (DSI) system. On initial call for heat, the combustion blower shall purge the heat exchanger for 20 seconds before ignition. After three unsuccessful ignition attempts, the entire heating system shall be locked out until manually reset at the thermostat/zone sensor. Units shall be suitable for use with natural gas or propane (field-installed kit) and also comply with the California requirement for low NOx emissions (Gas/Electric Only).

Economizer

This accessory shall be available with or without barometric relief. The assembly includes fully modulating 0-100 percent motor and dampers, minimum position setting, preset linkage, wiring harness with plug, spring return actuator and fixed dry bulb control. The barometric relief shall provide a pressure operated damper that shall be gravity closing and shall prohibit entrance of outside air during the equipment off cycle. Optional solid state or differential enthalpy control shall be available for either factory or field installation. The economizer arrives in the shipping position and shall be moved to the operating position by the installing contractor.

Supply and/or Return Air Smoke Detector

Smoke detector shall be factory installed photoelectric smoke detector mounted in the return air section (with or without the economizer or motorized damper option), AND/OR in the supply air fan compartment. The detector will be wired for continuous power whenever the unit is energized. Upon detection of smoke, the detector will shut down all unit operations. Local codes may dictate the location of detectors. Note: Due to the shipping position of the economizer or motorized damper, the return air smoke detector will not be completely factory installed. The wiring harness for the detector will be routed and tied off in the fan compartment for shipping. The smoke detector and barometric damper hood will also be installed in a shipping position in the fan compartment.

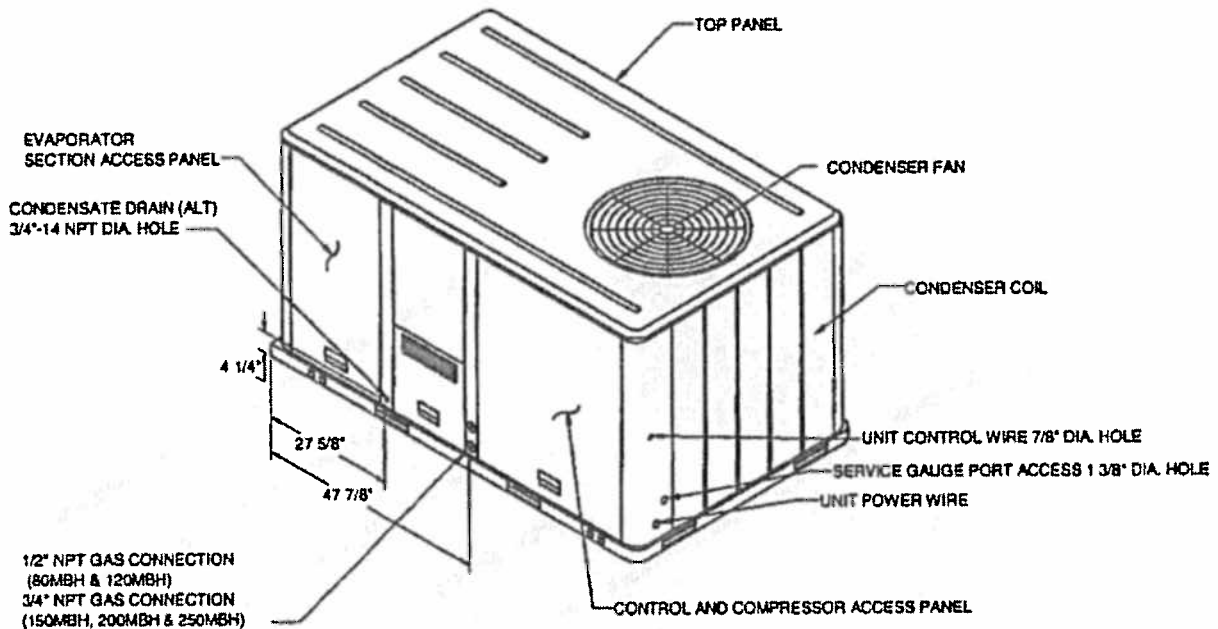
Accessory - Powered Exhaust

The powered exhaust shall provide exhaust of return air, when using an economizer, to maintain better building pressurization.

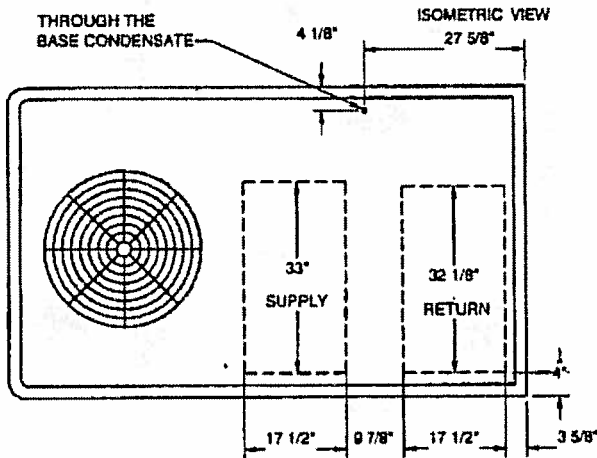
Supply, Return, and Plenum Air Smoke Detector

With this option installed, if smoke is detected, all unit operation will be shut down. Reset will be manual at the unit. In order for the supply air smoke detector or return air smoke detector to properly sense smoke in the supply air stream or the return air stream, the air velocity entering the smoke detector unit must be between 500 - 4000 feet per minute. Equipment covered in this manual will develop an airflow velocity that falls within these limits over the entire airflow range specified in the evaporator fan performance table. Supply and/or Return Smoke Detectors may not be used with the Plenum Smoke Detector.

Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
 Item: A1, A2 Qty: 3 Tag(s): Carrier

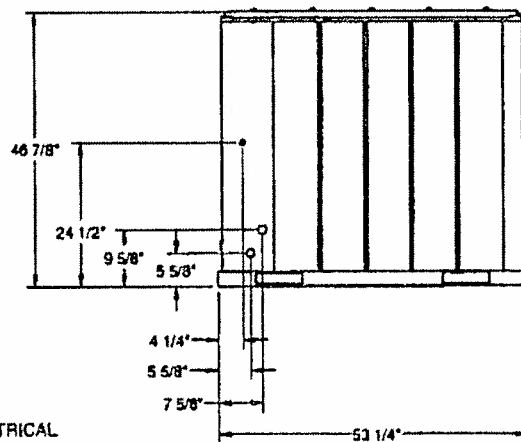
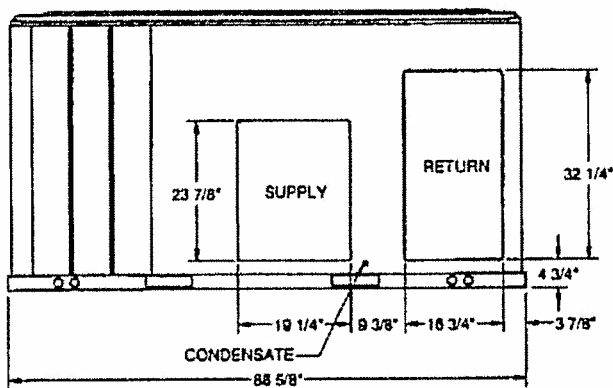


PACKAGED GAS / ELECTRICAL



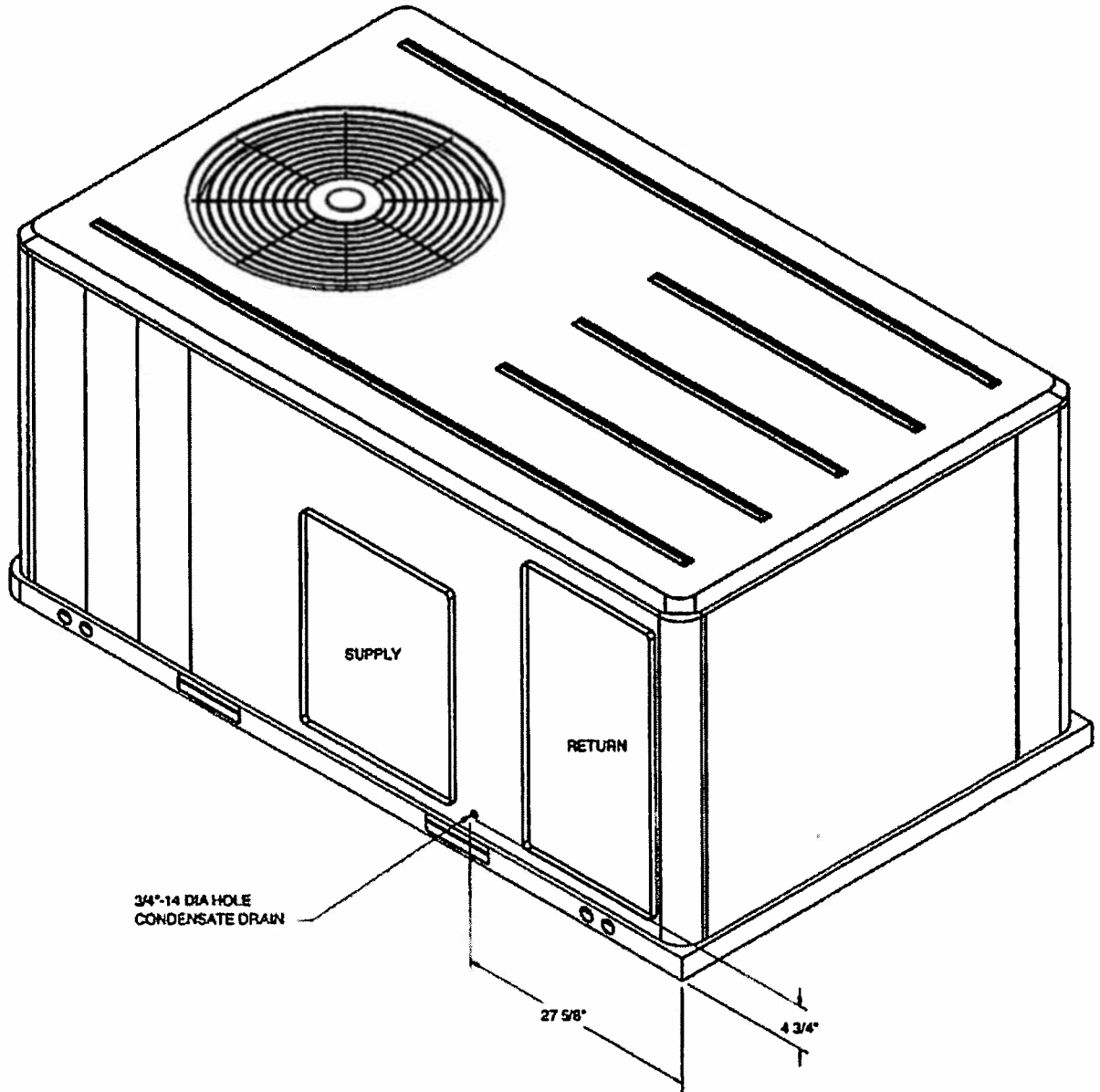
- NOTES:
 1. THRU -THE -BASE ELECTRICAL IS NOT STANDARD ON ALL UNITS.
 2. VERIFY ALL DIMENSIONS WITH INSTALLER DOCUMENTS BEFORE INSTALLATION.

PLAN VIEW UNIT
 DIMENSION DRAWING



PACKAGED GAS / ELECTRICAL
 DIMENSION DRAWING

Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A1 - A3 Qty: 4 Tag(s): Carrier, Bryant



ISOMETRIC-PACKAGED COOLING

Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A1 Qty: 2 Tag(s): Carrier

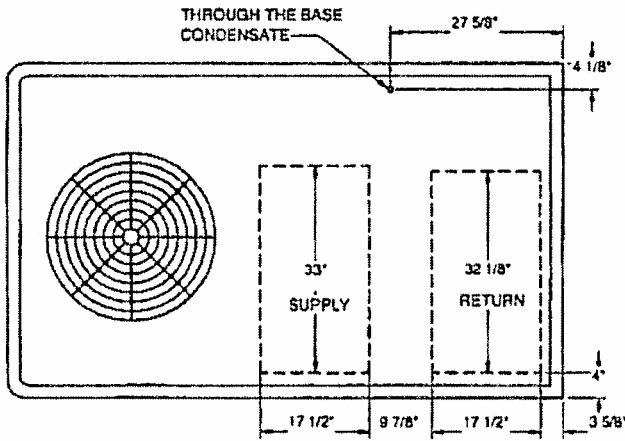
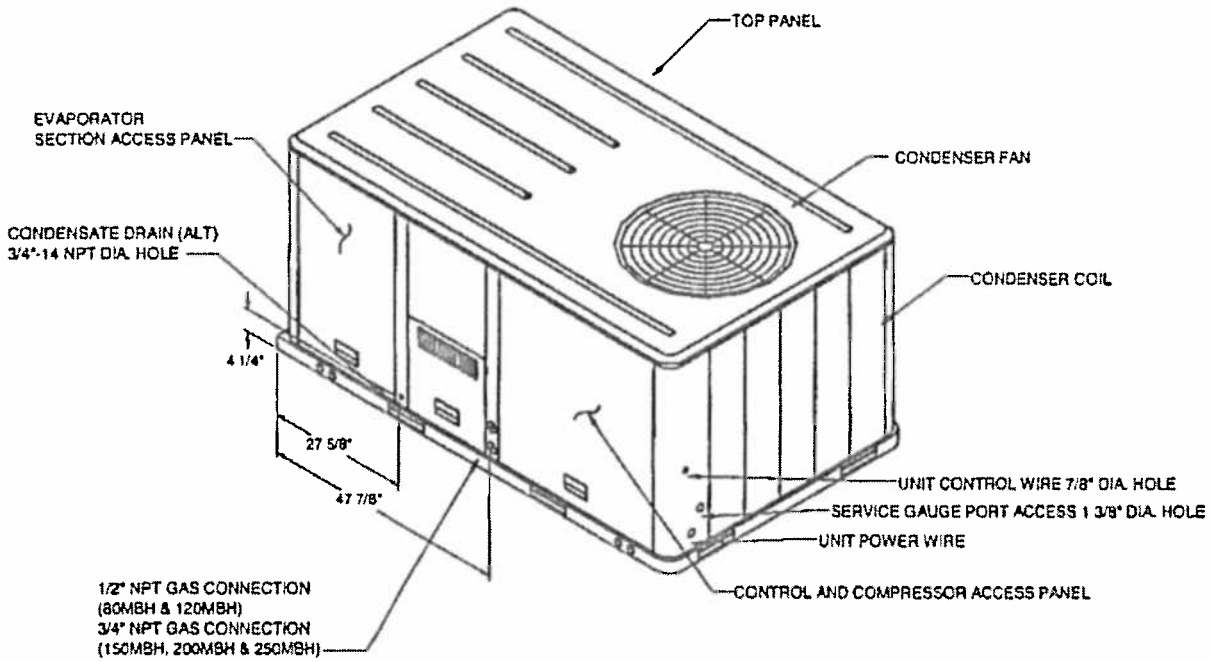
ELECTRICAL / GENERAL DATA

GENERAL (2)(4)(6) Model: YSC120F Oversized Motor Unit Operating Voltage: 187-253 Unit Primary Voltage: 208 Unit Secondary Voltage: 230 Unit Hertz: 60 Unit Phase: 3 EER: 11.3 Standard Motor MCA: 49.6 MFS: 80.0 MCB: 60.0		HEATING PERFORMANCE HEATING - GENERAL DATA Heating Model: High Heating Input (BTU): 250,000/175,000 Heating Output (BTU): 200,000/140,000 No. Burners: 5 No. Stages: 2 Gas Inlet Pressure Natural Gas (Min/Mix): 4.5/14 LP (Min/Max): 10.0/14.0 Gas Pipe Connection Size: 3/4"	
INDOOR MOTOR Standard Motor Number: 1 Horsepower: 3.8 Motor Speed (RPM): - Phase: 3 Full Load Amps: 8.5-8.5 Locked Rotor Amps: -		Oversized Motor Number: N/A Horsepower: N/A Motor Speed (RPM): N/A Phase: N/A Full Load Amps: N/A Locked Rotor Amps: N/A	
COMPRESSOR Circuit 1/2 Number: 2 Horsepower: 4.8/3.7 Phase: 3 Rated Load Amps: 20.5/18.0 Locked Rotor Amps: 155.0/91.0		OUTDOOR MOTOR Number: 1 Horsepower: 0.75 Motor Speed (RPM): 1100 Phase: 1 Full Load Amps: 4.0 Locked Rotor Amps: 9.4	
POWER EXHAUST ACCESSORY (7) (Field Installed Power Exhaust) Phase: N/A Horsepower: N/A Motor Speed (RPM): N/A Full Load Amps: N/A Locked Rotor Amps: N/A		FILTERS Type: Throwaway Furnished: Yes Number: 4 Recommended: 20"x25"x2"	
REFRIGERANT (2) Type: R-410 Factory Charge Circuit #1: 5.5 lb Circuit #2: 4.2 lb			

NOTES:

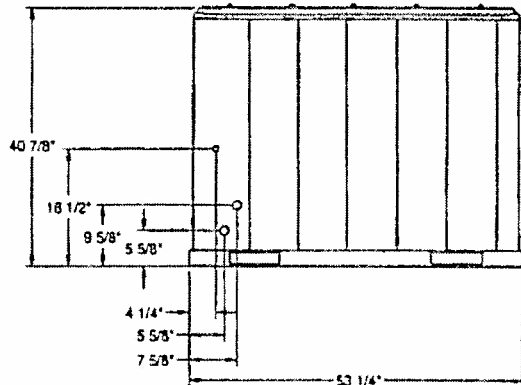
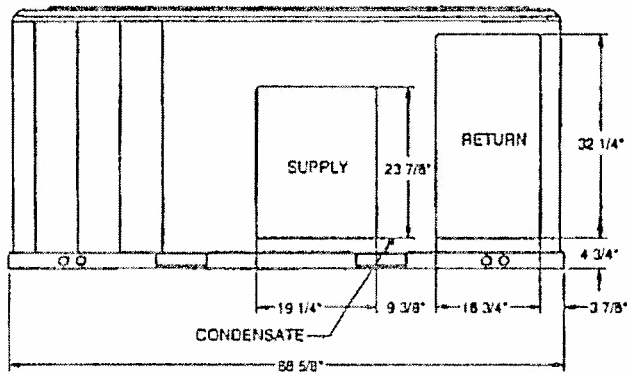
1. Maximum (HACR) Circuit Breaker sizing is for installations in the United States only.
2. Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
3. Value does not include Power Exhaust Accessory.
4. Value includes oversized motor.
5. Value does not include Power Exhaust Accessory.
6. EER is rated at AHRI conditions and in accordance with DOE test procedures.

Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A3 Qty: 1 Tag(s): Bryant



- NOTES:**
1. THRU - THE -BASE ELECTRICAL AND GAS IS NOT STANDARD ON ALL UNITS.
 2. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION

PLAN VIEW UNIT
 DIMENSION DRAWING



HORIZONTAL AIR FLOW

PACKAGED GAS / ELECTRICAL
 DIMENSION DRAWING

405 South Platte River Drive

Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
 Item: A3 Qty: 1 Tag(s): Bryant

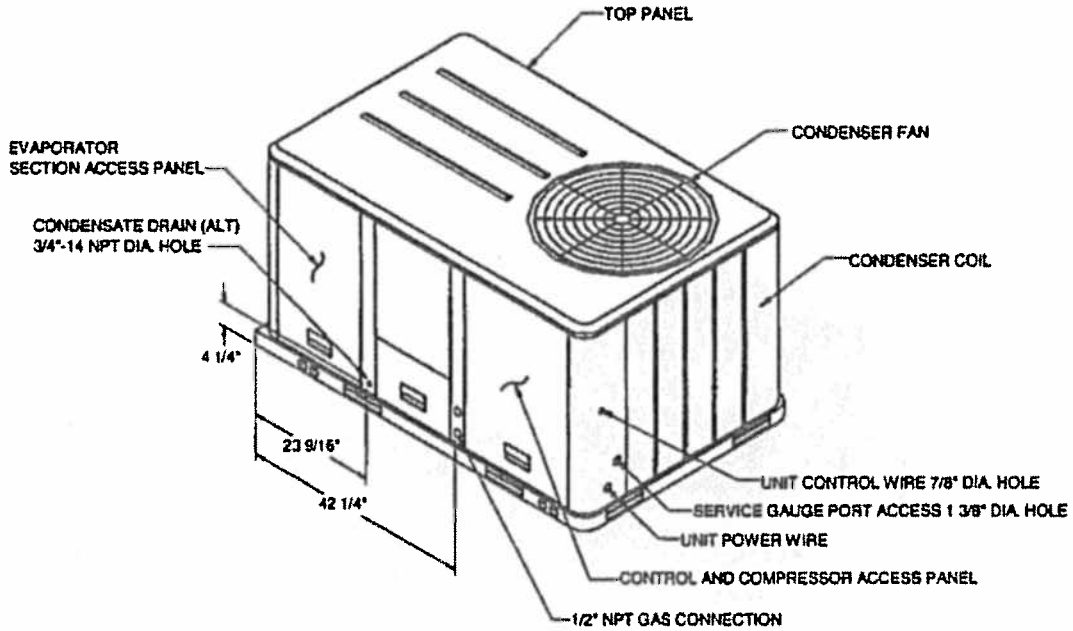
ELECTRICAL / GENERAL DATA

GENERAL ⁽²⁾⁽⁴⁾⁽⁶⁾ Model: YSC090F Oversized Motor Unit Operating Voltage: 187-253 MCA: N/A Unit Primary Voltage: 208 MFS: N/A Unit Secondary Voltage: 230 MCB: N/A Unit Hertz: 60 Unit Phase: 3 EER: 11.2 Standard Motor MCA: 38.2 MCA: N/A MFS: 60.0 MFS: N/A MCB: 60.0 MCB: N/A		HEATING PERFORMANCE HEATING - GENERAL DATA Heating Model: High Heating Input (BTU): 200,000/140,000 Heating Output (BTU): 160,000/112,000 No. Burners: 4 No. Stages: 2 Gas Inlet Pressure Natural Gas (Min/Mix): 4.5/14.0 LP (Min/Max): 11.0/14.0 Gas Pipe Connection Size: 3/4"	
INDOOR MOTOR Standard Motor Number: 1 Horsepower: 1.0 Motor Speed (RPM): -- Phase: 3 Full Load Amps: 3.6 - 3.5 Locked Rotor Amps: 12.5		Oversized Motor Number: N/A Horsepower: N/A Motor Speed (RPM): N/A Phase: N/A Full Load Amps: N/A Locked Rotor Amps: N/A	
COMPRESSOR Circuit 1/2 Number: 1 Horsepower: 6.7 Phase: 3 Rated Load Amps: 25.0 Locked Rotor Amps: 164.0		OUTDOOR MOTOR Number: 1 Horsepower: 0.7 Motor Speed (RPM): 1100 Phase: 1 Full Load Amps: 3.3 Locked Rotor Amps: 9.5	
POWER EXHAUST ACCESSORY ⁽³⁾ (Field Installed Power Exhaust) Phase: N/A Horsepower: N/A Motor Speed (RPM): N/A Full Load Amps: N/A Locked Rotor Amps: N/A	FILTERS Type: Throwaway Furnished: Yes Number: 4 Recommended: 18"x25"x2"		REFRIGERANT ⁽²⁾ Type Factory Charge Circuit #1: 5.5 lb Circuit #2: N/A

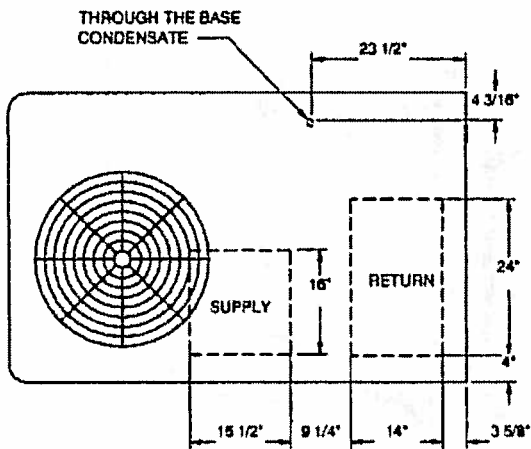
NOTES:

1. Maximum (HACR) Circuit Breaker sizing is for installations in the United States only.
2. Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
3. Value does not include Power Exhaust Accessory.
4. Value includes oversized motor.
5. Value does not include Power Exhaust Accessory.
6. EER is rated at AHRI conditions and in accordance with DOE test procedures.

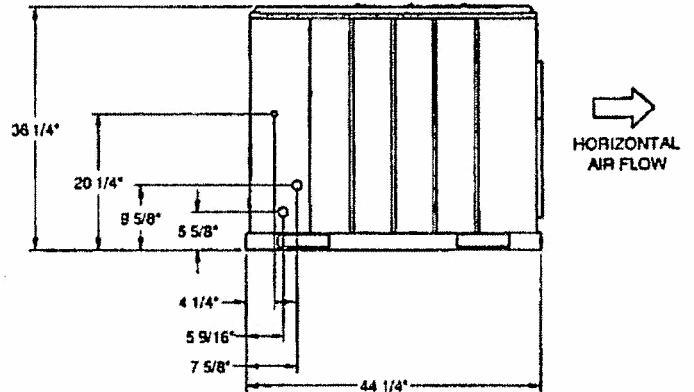
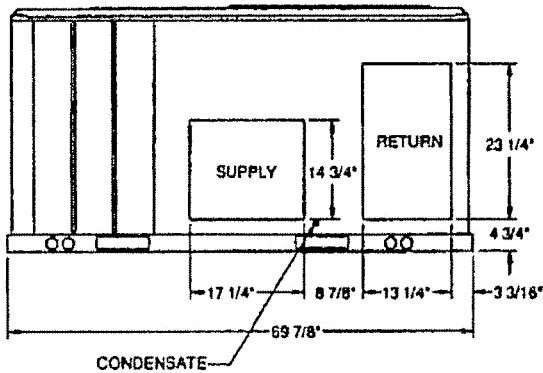
Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A4 Qty: 1 Tag(s): Fedders



- NOTES:**
1. THRU -THE -BASE GAS AND ELECTRICAL IS NOT STANDARD ON ALL UNITS.
 2. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION

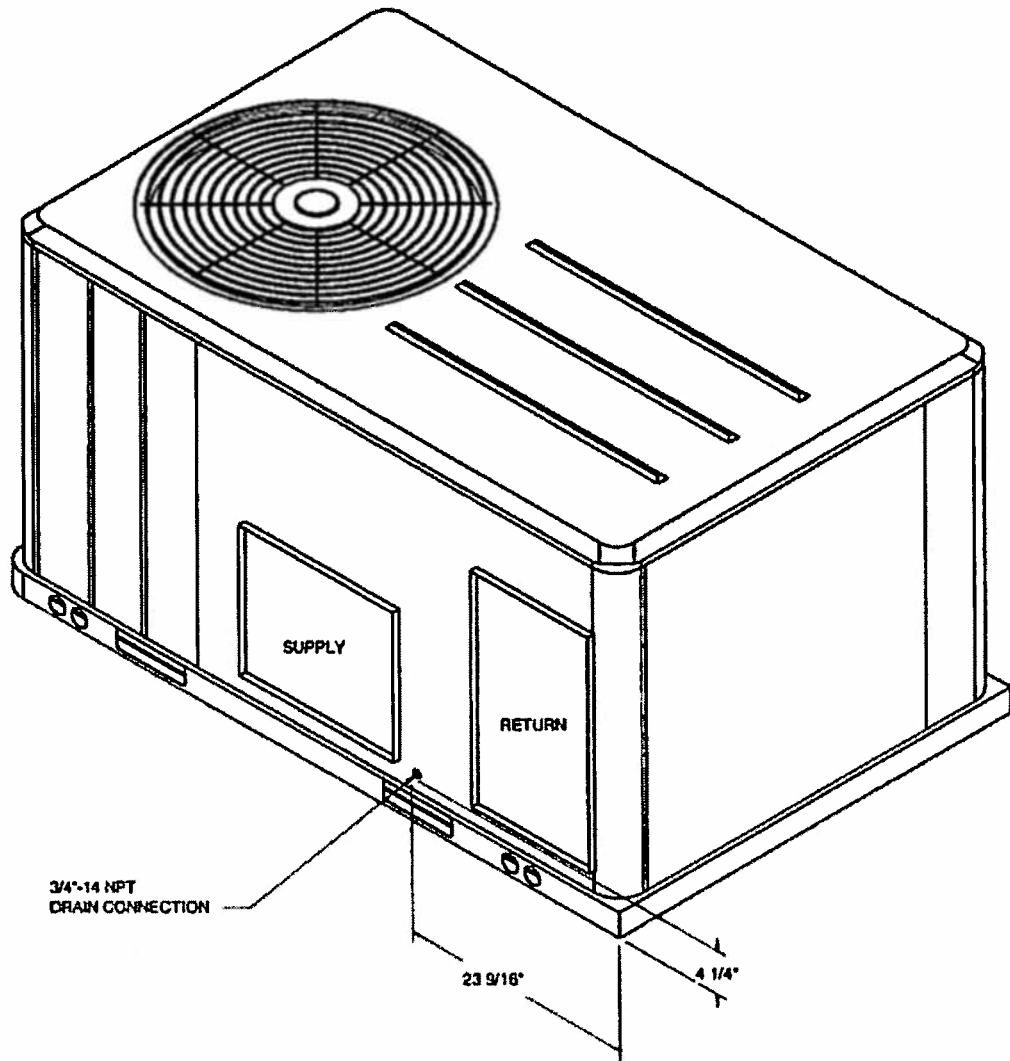


PLAN VIEW UNIT
 DIMENSION DRAWING



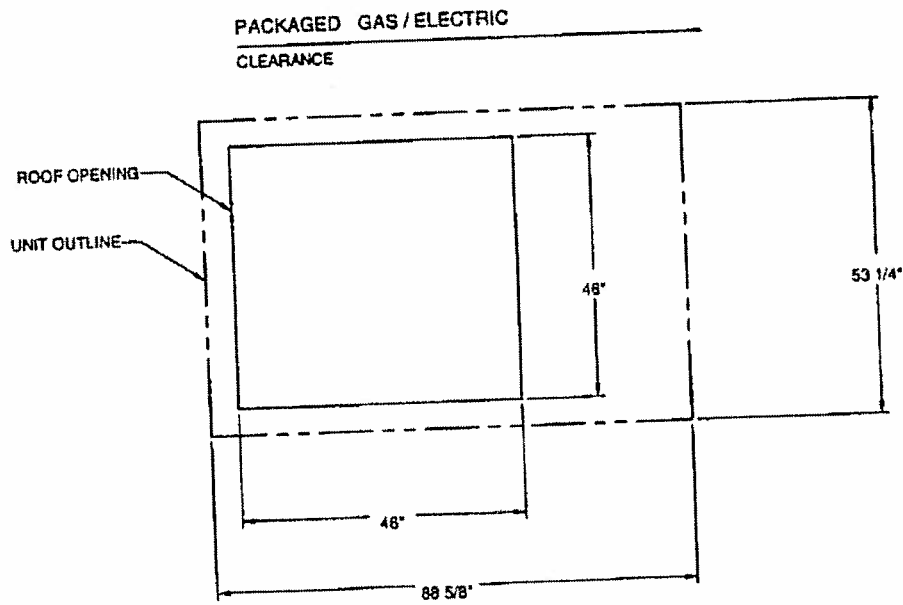
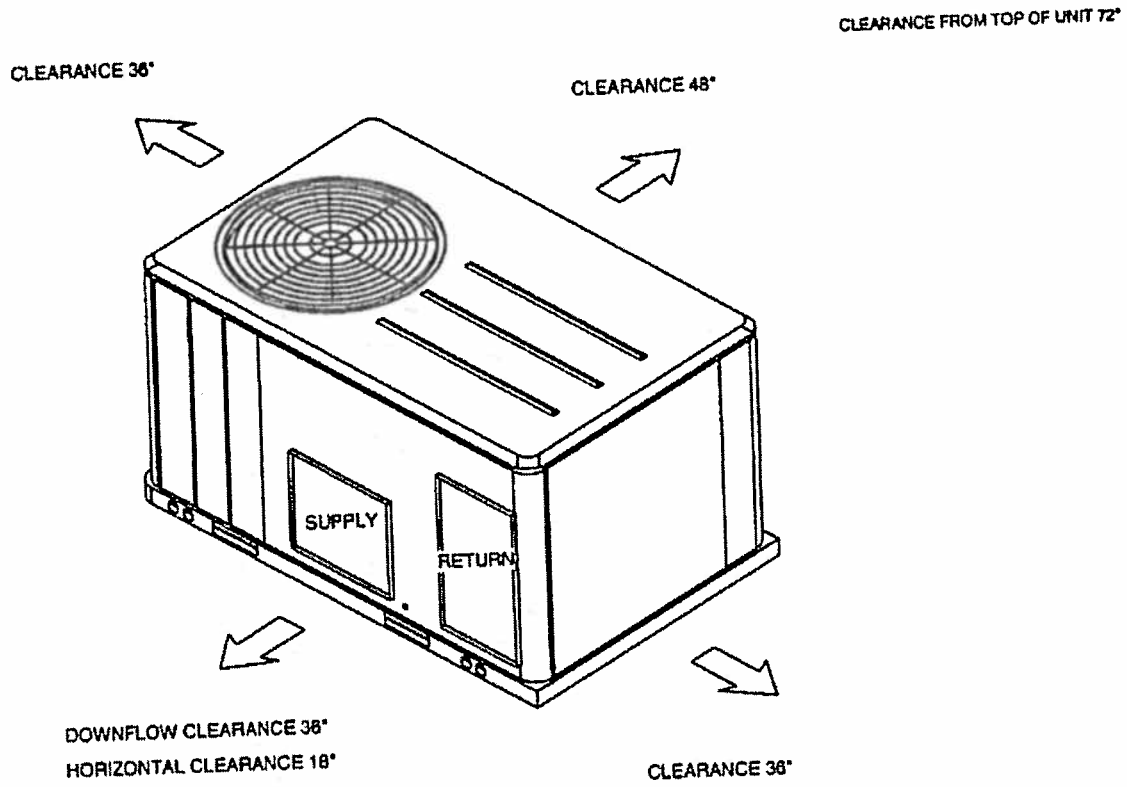
PACKAGED GAS / ELECTRICAL
 DIMENSION DRAWING

Unit Dimensions - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A4 Qty: 1 Tag(s): Fedders



ISOMETRIC-PACKAGED COOLING

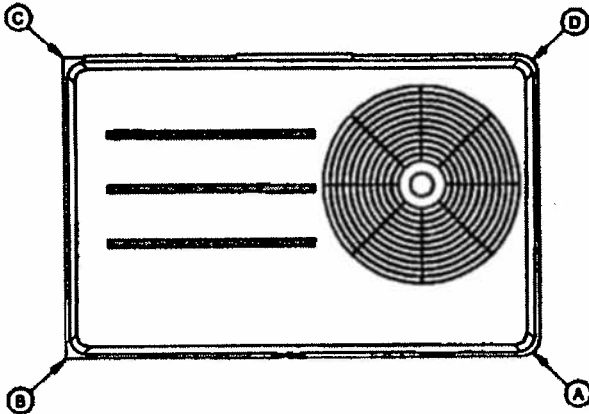
405 South Platte River Drive
Weight, Clearance & Rigging Diagram - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A1 - A3 Qty: 4 Tag(s): Carrier, Bryant



Weight, Clearance & Rigging Diagram - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
 Item: A2 Qty: 1 Tag(s): Carrier

INSTALLED ACCESSORIES NET WEIGHT DATA

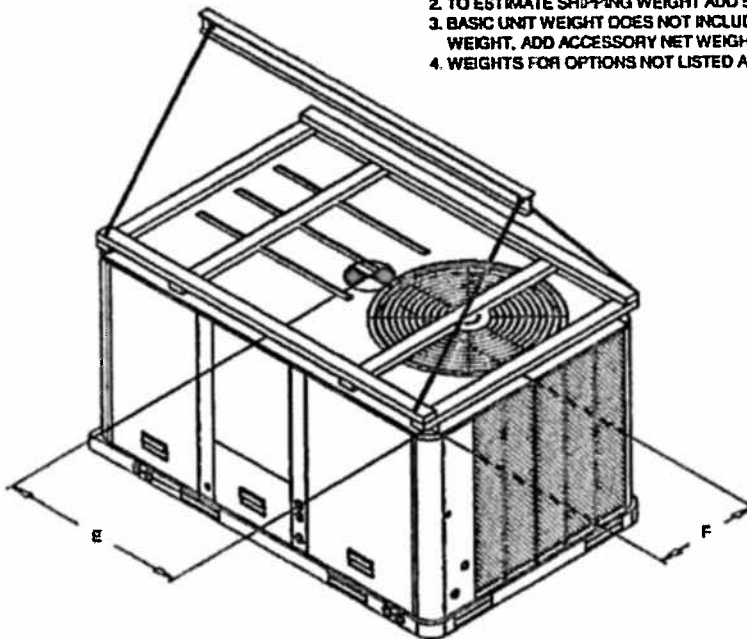
ACCESSORY		WEIGHTS			
ECONOMIZER		36.0 lb			
MOTORIZED OUTSIDE AIR DAMPER					
MANUAL OUTSIDE AIR DAMPER					
BAROMETRIC RELIEF					
OVERSIZED MOTOR					
BELT DRIVE MOTOR					
POWER EXHAUST		80.0 lb			
THROUGH THE BASE ELECTRICAL/GAS (FIOPS)					
UNIT MOUNTED CIRCUIT BREAKER (FIOPS)					
UNIT MOUNTED DISCONNECT (FIOPS)					
POWERED CONVENIENCE OUTLET (FIOPS)					
HINGED DOORS (FIOPS)					
HAIL GUARD		20.0 lb			
SMOKE DETECTOR, SUPPLY / RETURN		7.0 lb			
NOVAR CONTROL					
STAINLESS STEEL HEAT EXCHANGER					
REHEAT					
ROOF CURB					
BASIC UNIT WEIGHTS		CORNER WEIGHTS		CENTER OF GRAVITY	
SHIPPING	NET	(A)	(C)	(E) LENGTH	(F) WIDTH
1158.0 lb	1058.0 lb	(B) 242.0 lb	(D) 213.0 lb	41"	23"



PACKAGED GAS / ELECTRICAL
CORNER WEIGHT

NOTE:

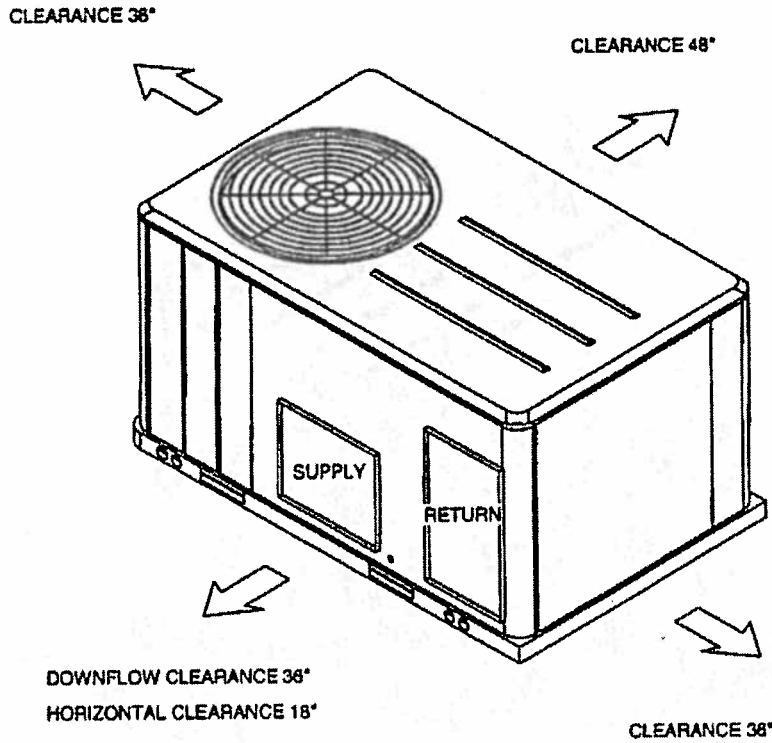
1. CORNER WEIGHTS ARE GIVEN FOR INFORMATION ONLY.
2. TO ESTIMATE SHIPPING WEIGHT ADD 5 LBS TO NET WEIGHT.
3. BASIC UNIT WEIGHT DOES NOT INCLUDE ACCESSORY WEIGHT. TO OBTAIN TOTAL WEIGHT, ADD ACCESSORY NET WEIGHT TO BASIC UNIT WEIGHT.
4. WEIGHTS FOR OPTIONS NOT LISTED ARE <5 LBS.



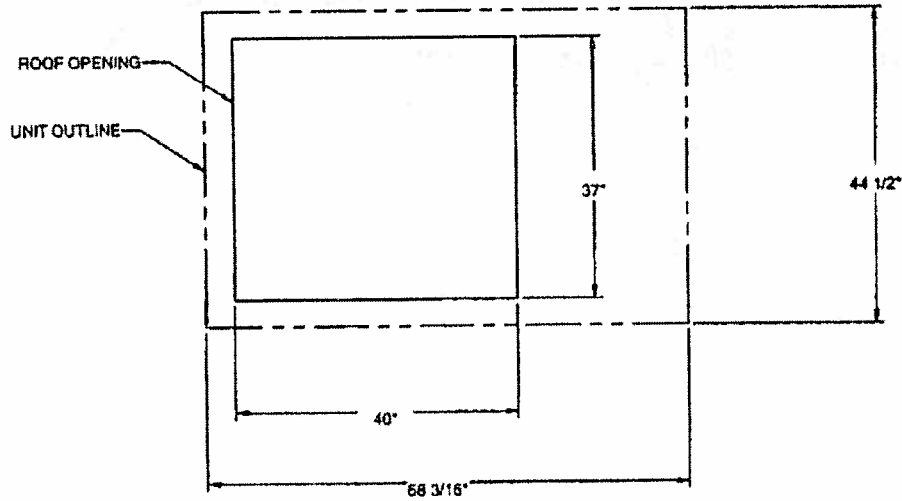
PACKAGED GAS / ELECTRICAL
RIGGING AND CENTER OF GRAVITY

Weight, Clearance & Rigging Diagram - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A4 Qty: 1 Tag(s): Fedders

CLEARANCE FROM TOP OF UNIT 72"

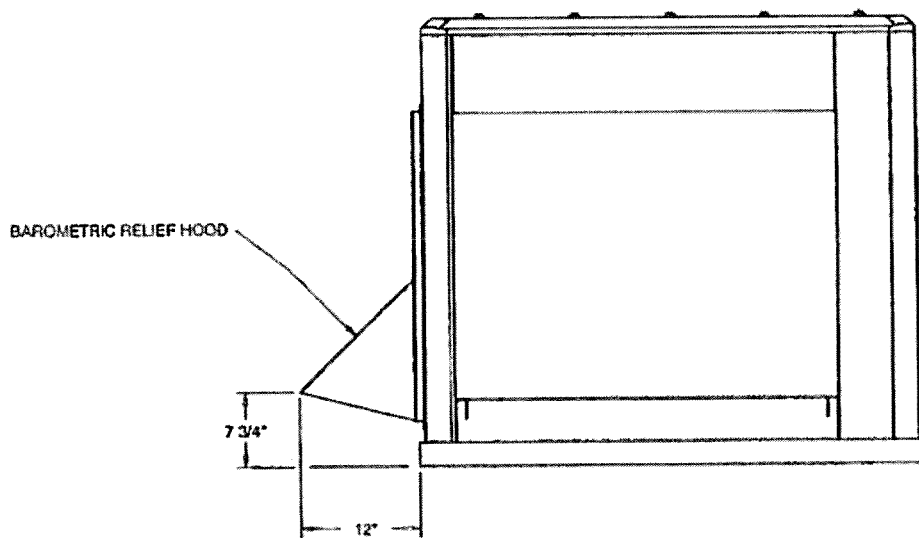
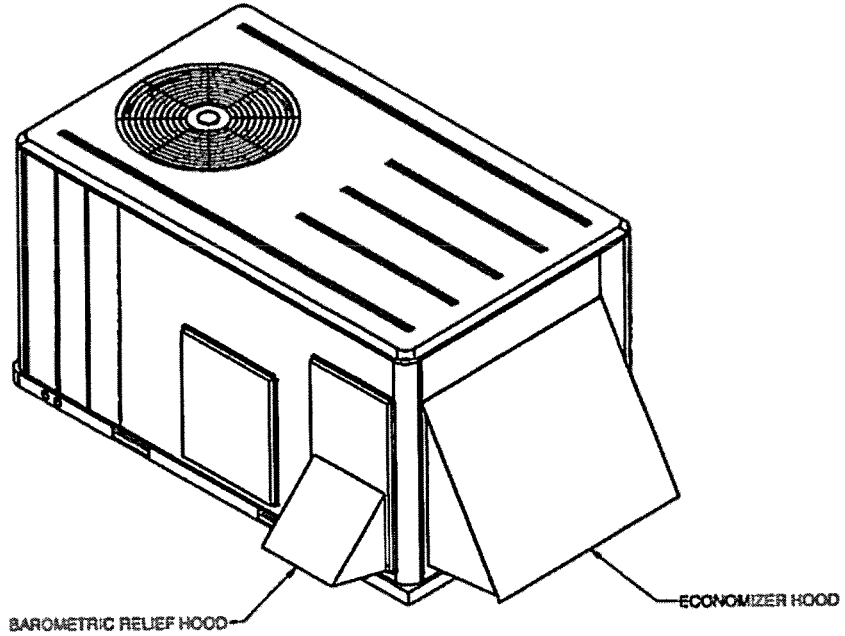


PACKAGED GAS / ELECTRIC
CLEARANCE



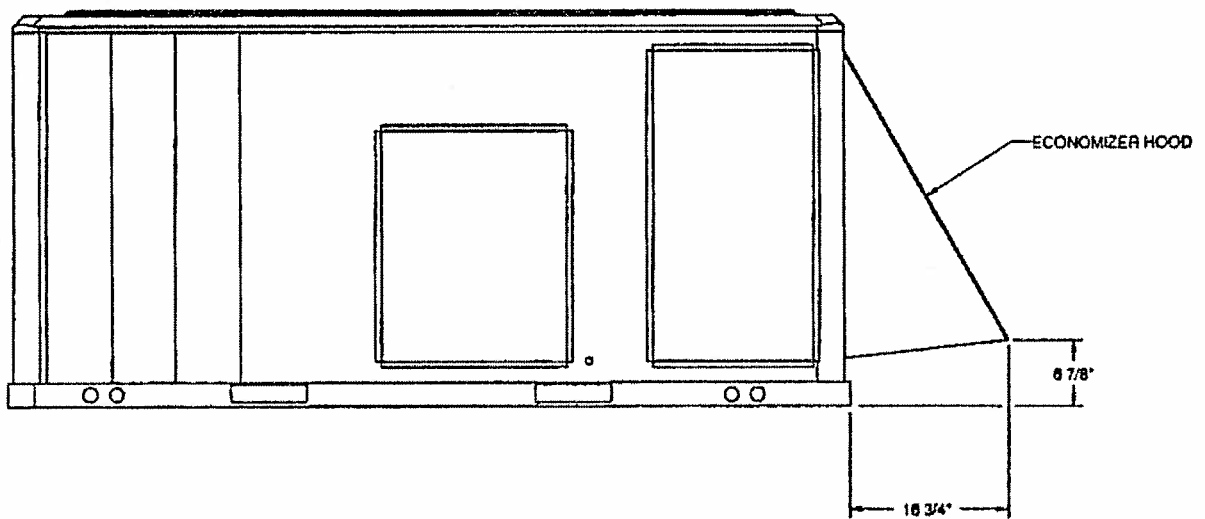
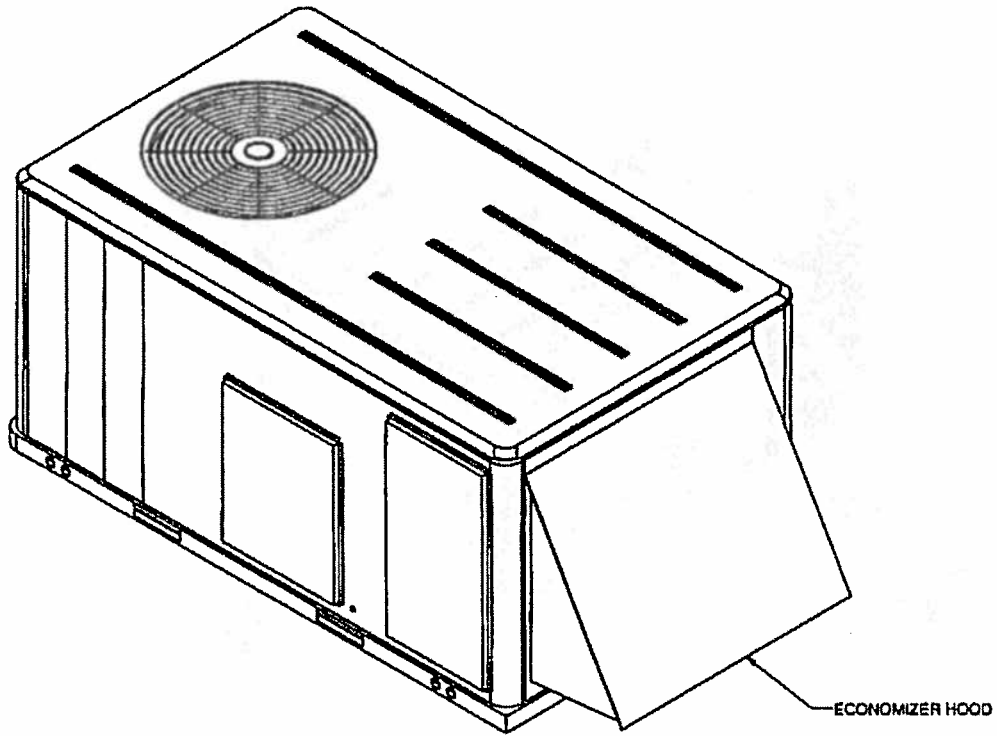
PACKAGED GAS / ELECTRIC
DOWNFLOW TYPICAL ROOF OPENING

405 South Platte River Drive
Accessory - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A1 Qty: 2 Tag(s): Carrier



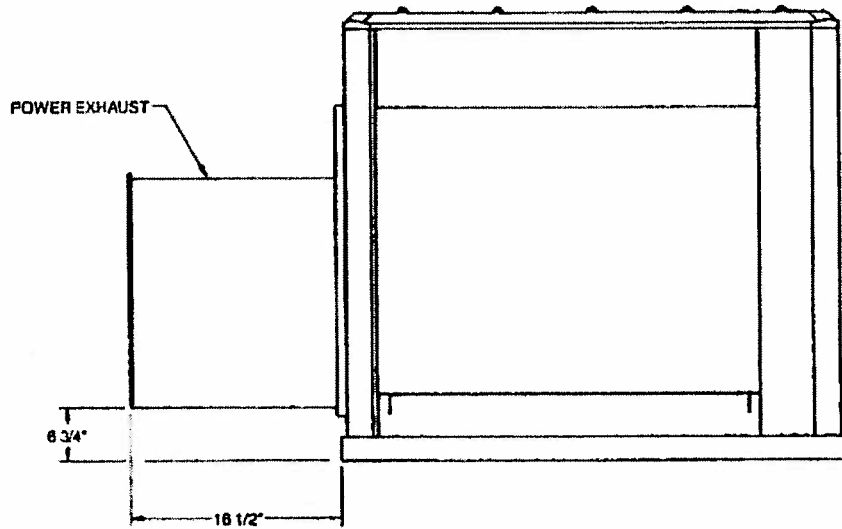
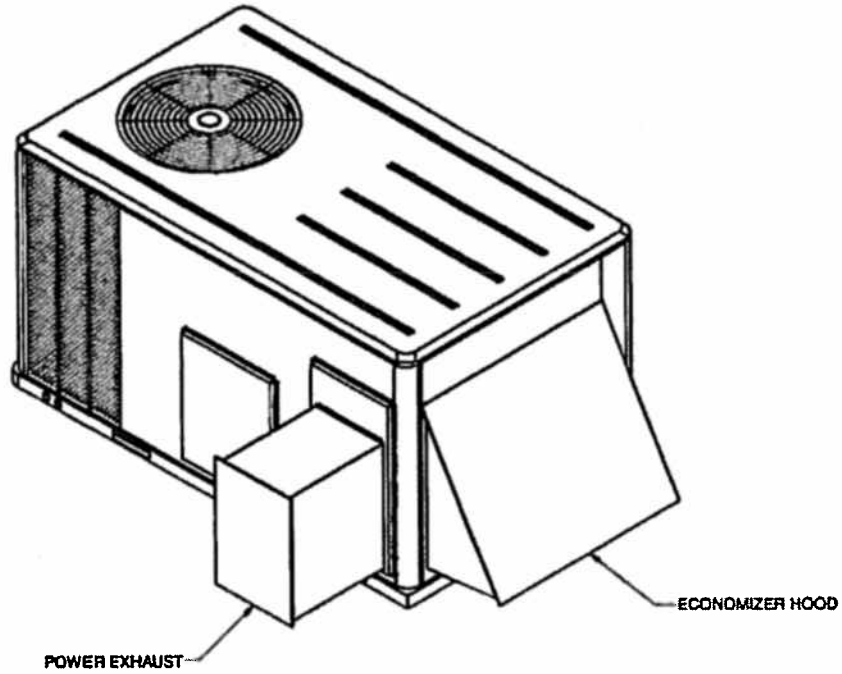
ACCESSORY - BAROMETRIC RELIEF DAMPER HOOD

Accessory - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A1, A2 Qty: 3 Tag(s): Carrier



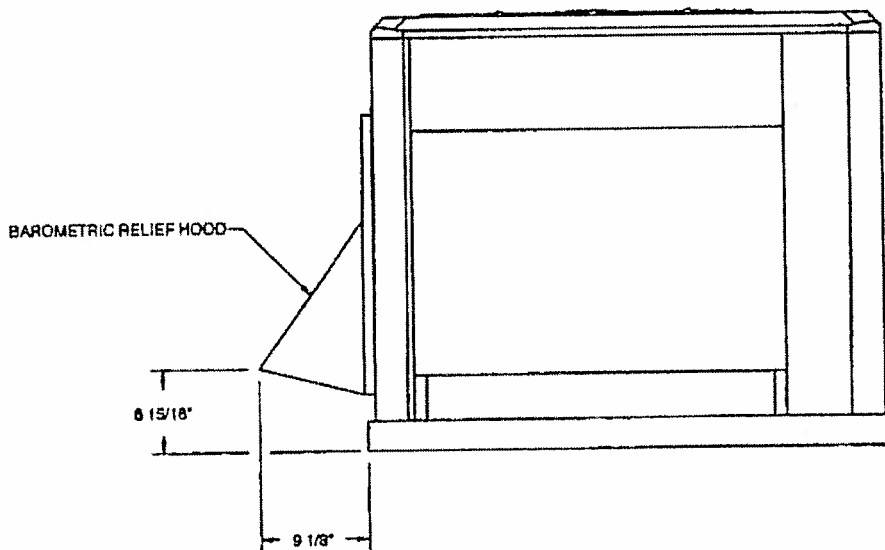
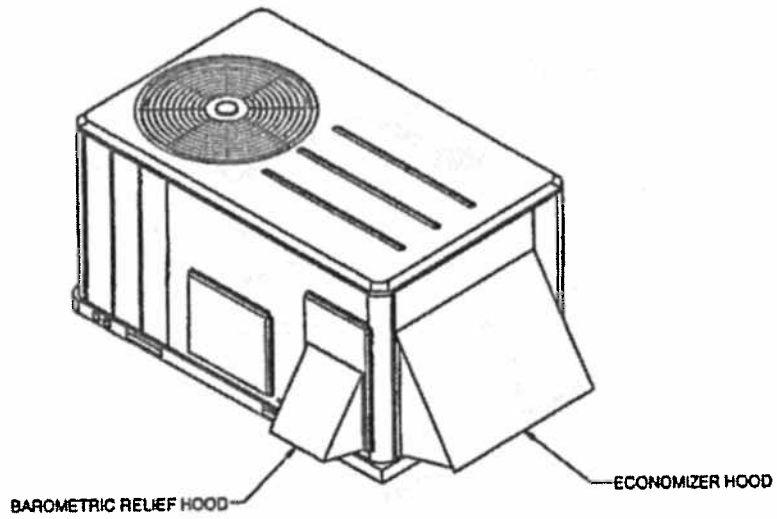
ACCESSORY - ECONOMIZER HOOD

Accessory - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A2 Qty: 1 Tag(s): Carrier



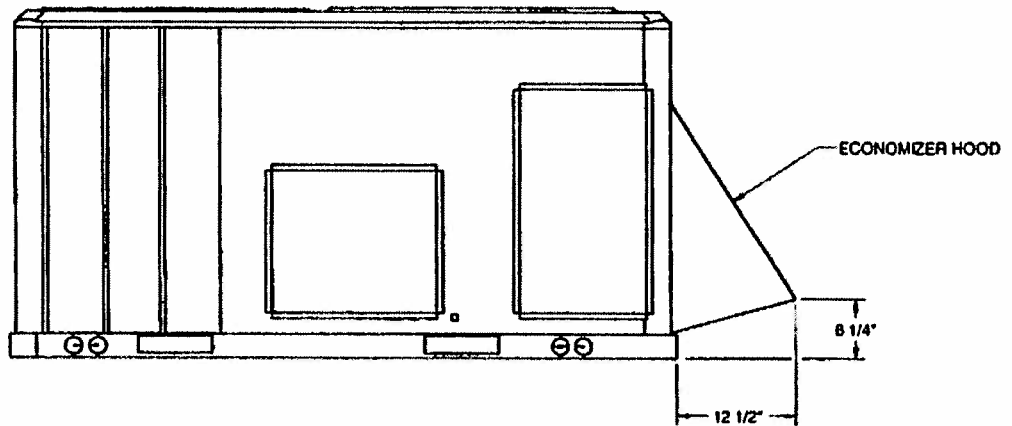
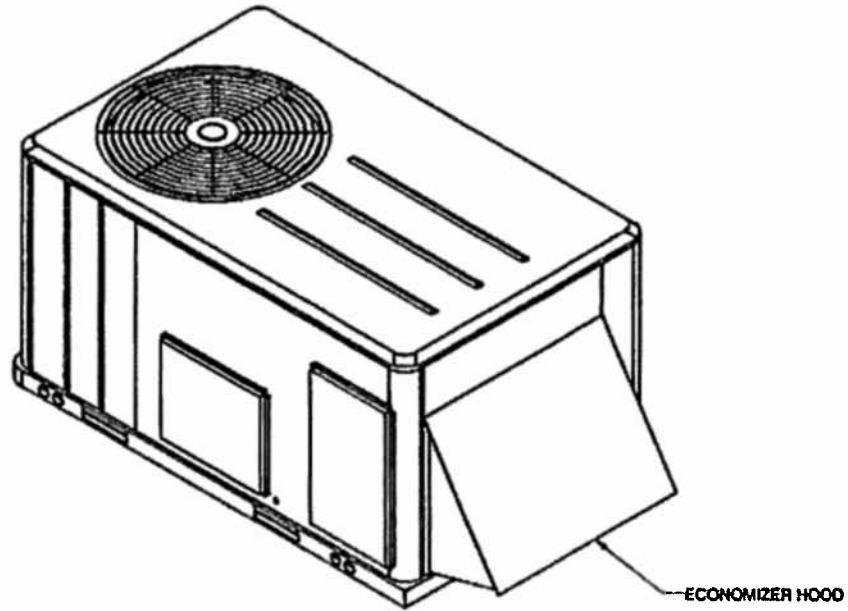
POWER EXHAUST AND HOOD
ACCESSORY

Accessory - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A4 Qty: 1 Tag(s): Fedders



ACCESSORY - BAROMETRIC RELIEF DAMPER HOOD

Accessory - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop
Item: A4 Qty: 1 Tag(s): Fedders



ACCESSORY - ECONOMIZER HOOD

Tag Data - UPG Accessories (Qty: 6)

Item	Tag(s)	Qty	Description
B1	No Tag	6	UPG Rooftop, Packaged Heat Pump, Split S

Product Data - UPG Accessories

Item: B1 Qty: 6
1 TCONT802AS32DA, Prog. 7 Day, 3H/2C (Fld)

J:JOBS111
 1144882\214
 05 South
 Platte River
 Drive

South Platte River Drive

October 24, 2014

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop

Item	Tag(s)	Qty	Description	Model Number
A2	Carrier	1	3-10 Ton R410A PKGD Unitary Gas/Electric	YSC120F3EHA--C 001000000A00000 00000000000

Field Installed Option Description	Part/Ordering Number
Power Exhaust Limit Switch	BAYLMSW001A
Power exhaust	BAYPWRX026A

Product Family - UPG Accessories

Item	Tag(s)	Qty	Description	Model Number
B1	No Tag	6	UPG Rooftop, Packaged Heat Pump, Split S	

Field Installed Option Description	Part/Ordering Number
Programmable 7 day 3 HV/2 Clg	TCONT802AS32DA

Exhibit B-4

(Exhibit on Following Page)

405 S. Platte River Drive

10-24-14

DX/DXL



Year Availability



High Recycled Content



Down DX/DXL Suspension System
Square Panels with QuietPac Performance

Features and Benefits

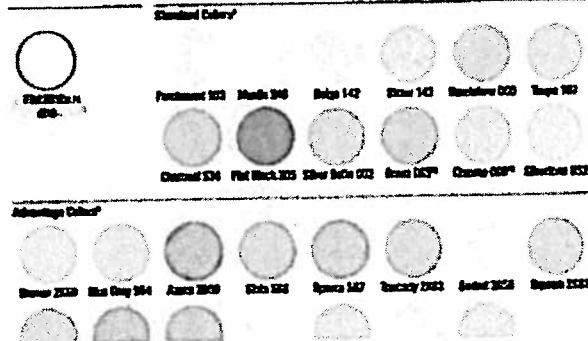
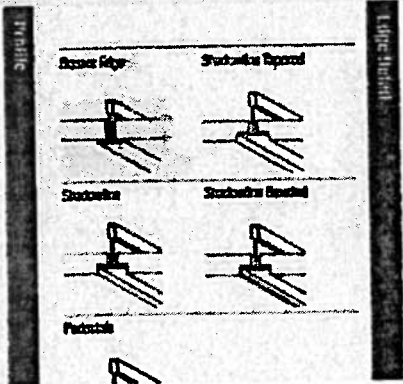
- 15/16" exposed tee system. Components for use in general and fire-rated applications.
- Maximum economy and design simplicity.
- Compatible with Loqax™ Integrated Ceiling Systems.
- DXL™ system features more than 80 UL designs (up to three hours).
- Cross-tee override ends resist twisting and give a professionally finished look.
- Meets or exceeds all national code requirements, including seismic.
- Proprietary Quick-RELEASE™ cross tees.
- High recycled content (HRC) available.
- Custom color available.
- ICC-ES evaluated approach to seismic design installations (ICC-ESR-1222).

Applications

- Fire-rated, interior general use areas
- Loqax Integrated Ceiling Systems

See LEED report tool at usgidealproducts.com for detailed sustainability information.

To order samples, go to usg.com



405 S. Platte River Drive

10-24-14

DX/DXL

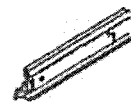
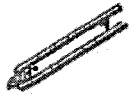
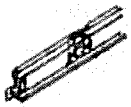
To order samples/illustrate:
 Web: enp.com
 E-mail: samples@enp.com
 Fax: 800 874.2348
 Technical Services:
 800 858.4700 (toll 874.2348)

Illustrate:
enp.com
enp.com/technical
 For the most up-to-date
 technical information:
enp.com/technical



Systems meet or exceed load
 compliance specifications per
 ASTM C635

15716 The System™ **Stain Free™**



ASTM Class	Length	Height	Item No.	Class	Color	Post Consumer RC	Total RC	Seismic Design Category ¹			Rated Load ²		
								ICC	ICC-ES Embodied Installation	4' Hanger Spacing	5' Hanger Spacing	6' Hanger Spacing	
Intermediate Duty	12" 3000mm	1-1/2" 38mm	DX/A 440 DXL24	1	Flat White Standard Advantage	up to 39%	up to 47%	A-C	7/8" Molding ACM7 Clip	12 Rn.LF	8.1 Rn.LF	3.6 Rn.LF	
			DX/A 440 DXL24HRC			57%	65%						
Heavy Duty	12" 3000mm	1.54" 42mm	DX/A 440 DXL26	1	Flat White Standard Advantage	up to 39%	up to 47%	A-F	7/8" Molding ACM7 Clip	16 Rn.LF	7.3 Rn.LF	4.9 Rn.LF	
			DX/A 440 DXL26HRC			57%	65%						
Cross Top 1"	2" 600mm	1" 25mm	DX/A 440 DXL216	2	Flat White Standard Advantage	up to 25%	up to 33%						
			DX/A 440 DXL216HRC			57%	65%						
Cross Top 1-1/2"	4" 1200mm	1-1/2" 38mm	DX/A 440 DXL424	1	Flat White Standard Advantage	up to 20%	up to 47%						
			DX/A 440 DXL424HRC			57%	65%						
			DX/A 440 DXL422HRC	Class A	Flat White Standard Advantage	up to 25%	up to 33%						
			DX/A 440 DXL422HRC			57%	65%						
5' 1500mm	1-1/2" 38mm	DX/A 440 DXL524	1	Flat White Standard	up to 39%	up to 48%							

High Recycled Content

Classified as containing greater than 50% total recycled content. Total recycled content is based on product composition of post consumer and pre-consumer (post industrial) recycled content per FTC guidelines.

Firemark

Wall Angle	Length	Item No.	Color	Wall Angle	Length	Item No.	Color	Post Consumer RC	Total RC
Molding** 	10' 3000mm	M20583-2 (up to 65% recycled content)	Flat White		12' 3000mm	M77* M77HRC*	Flat White+ Standard Advantage	up to 65%	65%
Shadowline** 	10' 3000mm	M5274* 2" shell for seismic (up to 65% recycled content)	Flat White Custom		10' 3000mm	M206* M206HD Heavy Duty M206SM Seismic	Flat White Custom	up to 65%	up to 58% up to 65%

Physical Data/ Footprints

Product literature and samples
 Data sheet: ACS167. Sample flat white - seismic: 271370. Sample flat white: 215673. Sample stain free: 200563. Sample flat black: 205100.

Shaded Double web G30 hot-dipped galvanized steel body and G30 hot-dipped galvanized steel cap.

Optional content For details, see LED report at enp.com/led.

Installation Must be installed in compliance with ASTM, CSA, ASTM E84, UL209 and standard industry practices, within all applicable code requirements. Alternative installation and fastening methods may be utilized when approved by the Authority Having Jurisdiction. USG recommends checking with the Authority Having Jurisdiction prior to designing and installing a suspended ceiling system.

Limitations Please refer to "A" or "20A" for exposed suspension systems in non fire rated, high humidity applications, into for applications only. Please refer to 902561 for more information about exterior ceiling applications.

ICC Evaluation Service, Inc., Report Description Suspended systems manufactured by USG Interiors, LLC, has been reviewed and are approved by listing in ICC-ES E-1222. Evaluation Reports are subject to re-evaluation, revision and possible cancellation. Please refer to enp.com/led or 800 USG 4700 (800 874.4368) for current reports. L.A. Research Report Compliance Code* based suspension systems manufactured by USG Interiors, LLC, have been reviewed and are approved by listing in the following L.A. Research Report number: 25704.

Code compliance The information presented is based on the best of our knowledge at the date of issuance. Changes made without notice, check with a local building code official and building a ceiling system. Other restrictions and exceptions may apply. The City of New York OSA and SEA Report Compliance Code* based suspension systems have been approved by listing in one or more of the following City of New York Board of Standards and Appeals, and Departments of Building, Material and Equipment Acceptance reports: BSA 618-60-04, BSA 184 77-04, SEA 700-81-04, SEA 303-03-14, SEA 123-05-14, SEA 312-03-14, SEA 123-03-14. ASTM C635 Standard for Load Compliance System tests or research load compliance manufacturers per ASTM C635. Minibars will not deflect more than 1/8" over 40'

span for L200 in Light Duty, Intermediate Duty or Heavy Duty categories. Notes 1. All "DX/DXL" ends are and cross bar connections meet IRC requirements for tension and compression strength. 2. Load test data shows uniform load in Rn.LF based on single span tests in accordance with ASTM C635 deflection limit of L200. 3. UL fire-rated listing, labeling and follow-up applies only to fire-rated components. 4. Color program for Imperial only. Contact Customer Service for custom color and finish-line colors. 5. Size fire rated only. 6. Cross bar hole punch spacings also available for 20" and 30" modules. 7. Available in metric. 8. Do not cross bar modules in additional sizes and lengths. 9. Non-fire-rated applications may use DX and DXL parts.

10. For moldings, information, see Performance & Style section. 11. Panels must be specified to be field cut, field-recessed and to provide sealed joints by an edge. 12. For G30, shaded moldings are also acceptable in some designs. Check UL Fire Resistance Directory for existing options. 13. Exact test clearance available on limited items. Notes We shall not be liable for incidental and consequential damages, directly or indirectly sustained, or for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within 90 days from date of use or receipt should have been discovered.

Exhibit B-5

(Exhibit on Following Page)

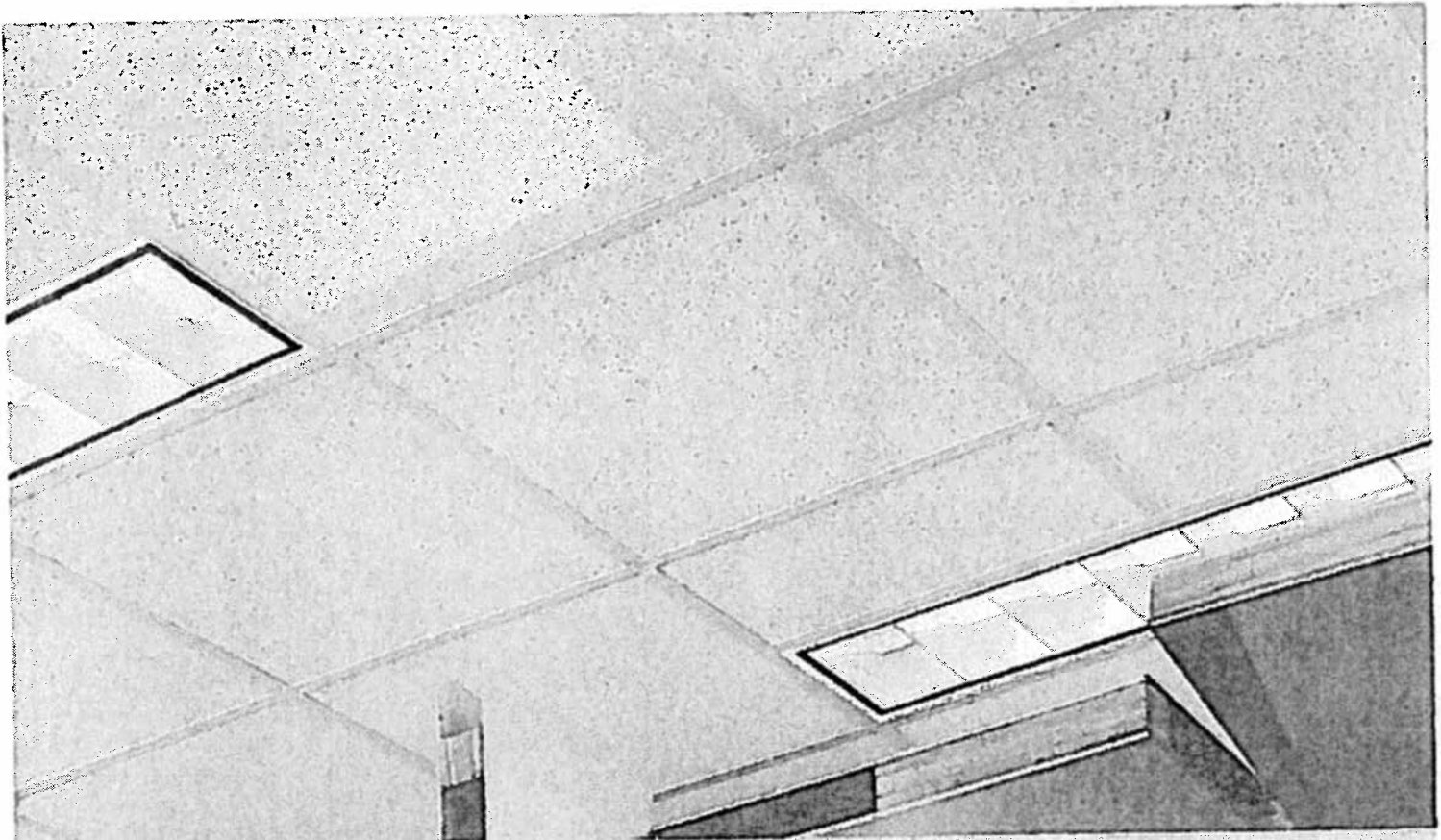
405 S. Platte River Drive

10-24-14

Radars



Year Availability
2110, 2120, 2310, 2742



**Radars Panels/
Down (D/MD)XL Suspension System**

Features and Benefits

- Non-directional pattern with a fresh, clean appearance offers fast, efficient installation.
- Economical, all-purpose ceiling pattern offered in many sizes.
- Optional Firezone® product designed to meet life-safety codes.
- USDA Certified Biobased Product!

Applications

- Schools
- Corridors
- Offices
- Retail stores

Substrate

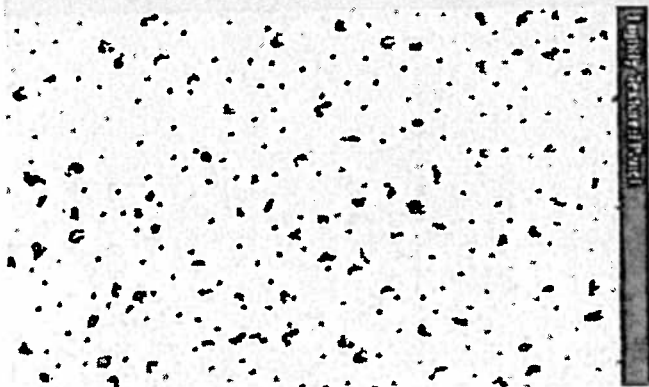
- Water-felted mineral fiber

See LEED report tool at osgdesignstudio.com for detailed sustainability information.

To order samples, go to osg.com



10
100



405 S. Platte River Drive

10-24-14

Radar

To order samples/illustrations:
 Web: radar.com
 E-mail: samples@radar.com
 Fax: 888 874-2348
 Technical Services:
 888 874-4700 (press 874-4288)

Illustrations:
radar.com
imgdesignstudio.com
 For the most up-to-date
 technical information:
imgdesignstudio.com
















Edge	Panel Size Imperial Metric (mm)	Class*	Item No. Imperial Metric	UL Classified		LR ¹	Color	Grid Options	VOC Emissions ²	Recycled Content ³	Panel Cost					
				MFC	CAC Ib/c											
				①	②	③		⊕	⊖	Ⓢ	Ⓢ					
Radar™ Panels ⁴	SQ 	2'x2'x5/8"	Class A 2110 ME2110	.55	33	.83	④	White	A, B	Low	24-28%	\$				
			2115	.55	35	.83	⑤	White	A	Low	41-49%	\$				
		2'x4'x5/8"	Class A 2310 ME2310	.55	35	.83	④	White	A, B	Low	24-28%	\$				
			2315	.55	35	.83	⑤	White	A	Low	41-49%	\$				
		2'x5'x5/8"	Class A 2619	.55	35	.83	④	White	A, B	Low	24-28%	\$				
			2617	.55	35	.83	⑤	White	A, B	Low	24-28%	\$				
	SLJ 	2'x2'x5/8"	Class A 2120 ME2120	.55	33	.83	④	White	C	Low	24-25%	\$				
			2125	.55	35	.83	⑤	White	C	Low	49-53% ⁷	\$				
		2'x4'x5/8"	Class A 2320	.55	35	.83	④	White	C	Low	24-25%	\$				
			2130	.55	33	.83	⑤	White	D, E, F, G	Low	24-29%	\$				
		FLB 	2'x2'x5/8"	Class A 2130	.55	33	.83	⑤	White	D, E, F, G	Low	24-29%	\$			
Radar Tiles ⁴	DESK 	Class A 2990	.50 ⁶	40 ⁶	④	.83	④	White	H	Low	44%	\$\$\$				
Radar Illuminor™ Tero/24 Panel The look of 2'x2' panels	SLJ 	Class A 2742	.55	35	.83		White	C	Low	25-29%	\$					
Pattern		Legend  Low Emission (VOC) Low-emitting performance meets CA Specification 01350 (CA Dept. of Health Services Standard Practice for the testing of VOC emissions) and is listed on the CDPD database for low-emitting materials. USG Certificate of Compliance for Low VOC Emissions also available on request.				③ ≥ 38 CAC ④ ≥ .85 LR ⑤ Feature*										
Grid Profile Options	A DX/DL™ 		B DW™ 		C DX/DL 		D Concave™ 		E Feature™ 		F Feature 1/8 		G Inset™ 		H DX/DL 	
Physical Data/ Footnotes	Product literature Data sheet: 1022289 ASTM E1284 classification Type II, Form 2, Pattern C, E and G, E, K ASTM E84 surface burning characteristics Class A Flame spread: 25 Smoke developed: 50			Weight 0.61 - 1.15 lbs/sq. ft. Thermal resistance R-1.4 (Class A, 5/8" panels and tile) R-1.7 (Class A, 3/4" panels) R-1.4 (Class A, 1/2" panels) R-1.8 (Feature, 5/8" panels)			Maximum backloading See USG 30-Year Limited Warranty Commercial Applications BC2102. Maintenance Can be cleaned easily with a soft brush or vacuum.			Notes 1. For details, see LEED report tool at imgdesignstudio.com . 2. Fire-rated items: see UL design details. 3. LR values are shown as average. 4. Contact USG for adhesive recommendations for 12"x12" plus-up applications. 5. Not UL Classified for acoustics. 6. This product has achieved both (St)Preferred and GreenGuard (St)Preferred Performance and Certified Product Labeling. See the complete listing of all USG ceiling panels on imgdesignstudio.com . 7. Recycle content not available at all plants.						

Exhibit C
(Form of Deed)

After recording, return to:
Division of Real Estate
City and County of Denver
201 West Colfax Avenue Dept 1207
Denver, CO 80202

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED ("Deed"), made as of this _____ day of _____, _____, by _____, a _____ corporation, whose address is _____ ("Grantor") to the CITY AND COUNTY OF DENVER, a Colorado municipal corporation of the State of Colorado and home rule city, whose address is 1437 Bannock Street, Denver, Colorado 80202 ("Grantee").

WITNESSETH, that the Grantor, for and in consideration of the sum of _____ Dollars (\$ _____) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and by these presents does hereby grant, bargain, sell, convey and confirm, unto the Grantee, and its successors and assigns forever, the real property described below, together with all improvements thereon, owned by the Grantor situate, lying and being in the City and County of Denver, State of Colorado, and being more particularly described on Exhibit A attached hereto and incorporated herein ("Property");

TOGETHER WITH all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all of the estate, right, title, interest, claim and demand whatsoever of the Grantor, either in law or equity, of, in, and to the above-bargained Property, together with the hereditaments and appurtenances;

TO HAVE AND TO HOLD the Property above bargained and described with the appurtenances, unto the Grantee, and its successors and assigns forever. The Grantor, for itself and its successors and assigns does covenant and agree that it shall and will WARRANT AND FOREVER DEFEND the above-bargained Property in the quiet and peaceable possession of the Grantee, and its successors and assigns, against all and every person or persons [claiming the whole or any part thereof, by, through, or under the Grantor,] except those items set forth on Exhibit B, attached hereto and incorporated herein..

No separate bill of sale with respect to improvements on the Property will be executed.

IN WITNESS WHEREOF, the Grantor has executed this Deed on the date set forth above.

ATTEST:

By: _____

Name: _____

Title: _____

a _____ Colorado

By: _____

Name: _____

Title: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ___ day of _____, 20___, by _____, as _____ of _____.

Witness my hand and official seal.

My commission expires: _____

Notary Public

Exhibit A
Legal Description

EXHIBIT D

(Exhibit on Following Pages)



SCALE 1" = 30'

Exhibit D

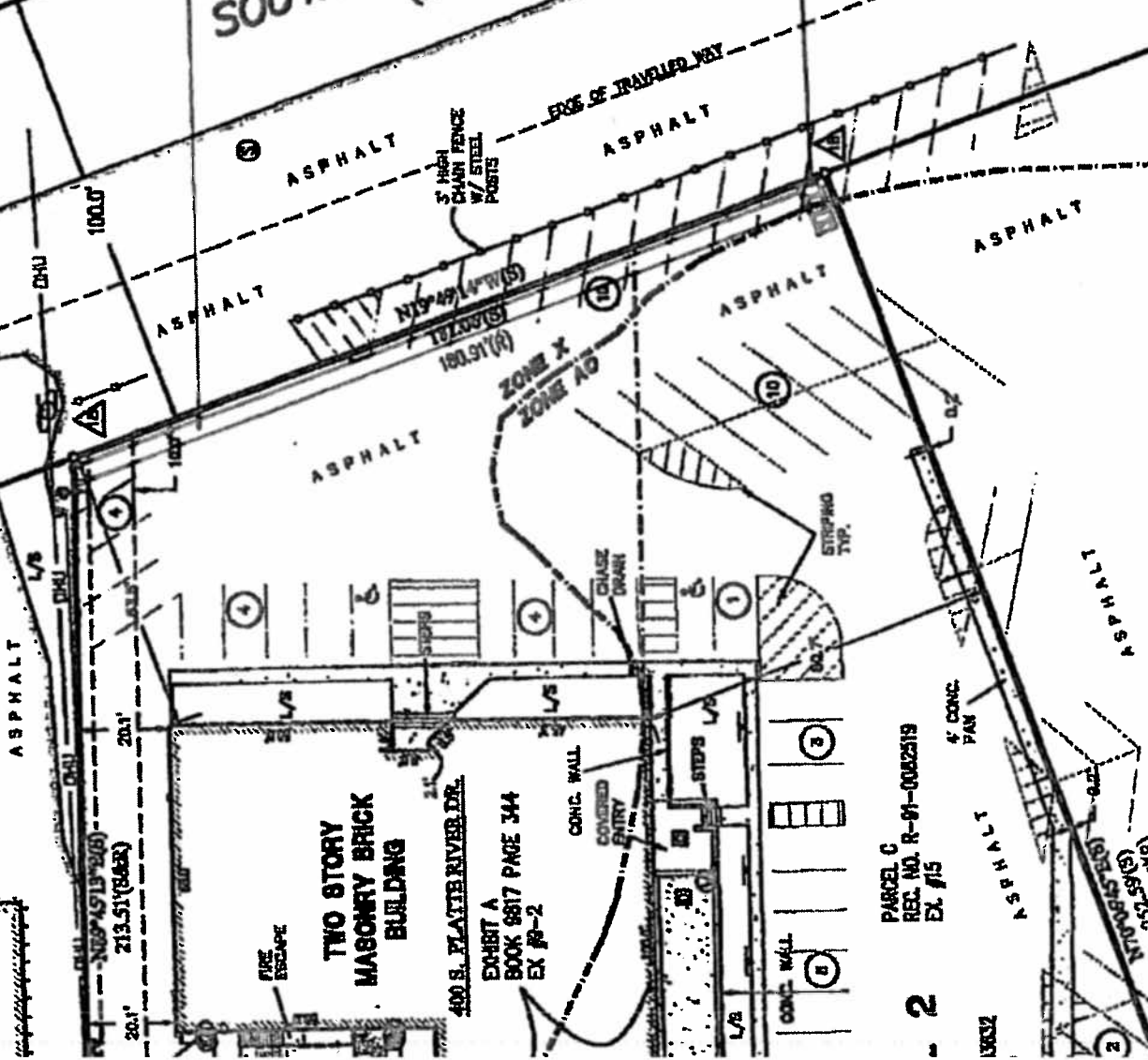
Not To Scale

3' wide underground electrical easement (immediately west of Easterly property boundary)

4' x 6' Pole Sign Easement

CHANNEL OF THE SOUTH PLATTE RIVER
ORDINANCE 107, SERIES 1955

SOUTH PLATTE RIVER DRIVE
(188' RIGHT OF WAY)



PARCEL C
REC. NO. R-91-0082519
EX. #15

2

REC. NO. 2006185450

EXHIBIT B
REC. NO. 2001205632

PARCEL F

REC. NO. R-91-0082519

400 S. PLATTE RIVER DR.