# FIBROUS GLASS DUCT SYSTEM INSTALLATION CHECK LIST

All comments should be in the “YES OR NOT APPLICABLE” column. If a check mark appears in the “NO” column, bring it to the attention of the HVAC Contractor.

<table>
<thead>
<tr>
<th>Project name and number</th>
<th>HVAC contractor</th>
<th>Mechanical contractor</th>
<th>General contractor</th>
<th>Engineer</th>
<th>Checklist compiled by</th>
<th>Date</th>
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</thead>
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**Materials needed**
- Latest edition, NAIMA Fibrous Glass Duct Construction Standard
- Manufacturer’s recommendations (where applicable)
- Manufacturer’s installation instruction sheets
- Submittal drawings
- Plans and specifications for job
- Measuring tape
- Approved closure materials to be used to close any opening made in duct during inspection. (See Section IV, CLOSURE)

<table>
<thead>
<tr>
<th>General</th>
<th>YES/NA</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is fibrous glass duct system installed under conditions permitted in NAIMA manual, pages 1-6 and 1-7?</td>
<td>( )</td>
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<tr>
<td>Is system operating within the design limitations for which it was built?</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>Have all tears or punctures of facing material been repaired using proper techniques?</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Are all sheet metal accessory items galvanized or plated?</td>
<td>( )</td>
<td>( )</td>
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**Product**
- Is product used identified as duct board by facing imprint? | ( ) | ( ) |
- Is UL label present? (While each board has one UL label, not every duct section will be labeled.) | ( ) | ( ) |
- Are there NO visual signs of facing delamination (ballooning, condensation if system operating)? | ( ) | ( ) |

**Fabrication and installation (See Sections II and III)**
- Are turning vanes installed in accordance with NAIMA standard? (Pressing your hand into the cheek of the ell will reveal if specified turning vanes are being used.) | ( ) | ( ) |
- When metal parts are attached, are 2½” (64mm) square or 3” (76mm) diameter galvanized or plated steel washers installed on 16” (410mm) (max.) centers? | ( ) | ( ) |
- Is system completely free from tears or punctures in the facing? | ( ) | ( ) |
- (These are readily repaired following procedures given in Section VIII of this Standard.) | ( ) | ( ) |
- Is system free from areas where excessive amounts of closure materials, such as several wraps around a joint, may have been used to conceal potential problem areas? | ( ) | ( ) |
- Are all system joints tight, free from bulges, with joint closures showing good workmanship? | ( ) | ( ) |
- Are all fittings fabricated in accordance with instructions in Section III, and do they demonstrate good workmanship? | ( ) | ( ) |
- Have offsets been installed so duct sections aren’t forced to bend around obstructions? | ( ) | ( ) |
- Are all panels in any fitting at least 6” (150mm) (min.) long, including male or female joints? | ( ) | ( ) |

**Dampers:** See NAIMA FGDCS, pages 3-22.
- If a motorized damper is being used, is the sheet metal sleeve extended so the operator is mounted on the same sleeve with the damper? | ( ) | ( ) |
- On a manual damper, does the quadrant move a full 90 degrees? | ( ) | ( ) |

**Fire dampers:** See NAIMA FGDCS, page 3-23.
- Is sheet metal sleeve present, and is duct properly attached to it with fasteners on 12” (300mm) (max.) centers? (Fibrous glass ducts must not penetrate assemblies required to have a fire damper.) | ( ) | ( ) |
- Is interior sleeve present and properly attached with screws and washers on 16” (400mm) (max.) centers? | ( ) | ( ) |

**Flanged heaters:** See NAIMA FGDCS, page 3-24.
- Are interior sleeves present and properly attached with screws and washers on 16” (400mm) (max.) centers? | ( ) | ( ) |
- Is heater properly supported? | ( ) | ( ) |
**Slip-in heaters:** See NAIMA FGDCS, page 3-25.
- Is interior sleeve present and properly attached with screws and washers on 16" (400mm) (max.) centers? Is heater properly supported? YES/NA NO
- Access doors: See FGDCS, pages 3-26 and 3-27.
  - Is installation in accordance with NAIMA Standard? YES/NA NO

**Grilles, diffusers, registers:** See NAIMA FGDCS, pages 3-28 and 3-29.
- Is the extra weight of the item being separately supported and not dependent on the duct alone for support? (Exception: Registers not greater than 150 square inches may be attached to the duct wall with metal channel, and without other support.) YES/NA NO

**Unit connection:** See NAIMA FGDCS, page 3-30.
- Are connections to unit or sheet metal ducts in accordance with NAIMA manual standards? YES/NA NO

**Closure: See NAIMA FGDCS, Section IV.**
- Are all longitudinal seams and circumferential joints properly taped or closed with glass fabric and mastic? YES/NA NO
- Are staples of the outward clinching type? YES/NA NO
  - When staples are not used, are 8" (200mm) (min.) tape tabs of approved type used in place of staples? YES/NA NO
  - (Tab spacing requirements are 12" (300mm) on centers, minimum 1 per side.) YES/NA NO
- Are staples or tape tabs correctly spaced on circumferential joints? YES/NA NO
  - Are all pressure sensitive tape closures made with tape of proper width, rubbed down adequately, with staples or scrim in facing clearly visible? YES/NA NO
  - Are heat activated closures applied correctly, as shown by changing dot color? YES/NA NO
  - Does tape show manufacturer name, UL 181A nomenclature, and date code? YES/NA NO
  - If glass fabric and mastic are used, is the mesh of the glass fabric completely filled with mastic? YES/NA NO

**Reinforcement: See NAIMA FGDCS, Section V.**
- Is reinforcement system of a recommended type (formed metal channel, tie rod, or both)? YES/NA NO
- Is tie rod wire galvanized, and 12 gauge? YES/NA NO
- Is tie rod spacing correct according to duct span, board type, and static pressure? YES/NA NO
  - Are tie rod washers 2½" (64mm) square or 3" (76mm) diameter, of galvanized or plated steel, and of proper thickness? YES/NA NO
  - Do tie rod washers have turned edges facing away from duct board so they will not cut into it? YES/NA NO
  - If tie rods reinforce a butt joint, are they used on both sides of the joint? YES/NA NO
  - Is tie rod termination one of those documented in NAIMA FGDCS, or by manufacturer's recommendations? YES/NA NO
- Are sag support devices used on ducts of 48" (1220mm) span or greater, to support top panels? YES/NA NO
  - Do tie rods run straight through ducts and not at angles except as provided for in reinforcing certain fittings? YES/NA NO
  - Are heels of tees and elbows, and end caps, reinforced when necessary to meet NAIMA FGDCS, Section V requirements? YES/NA NO
  - When formed sheet metal channel reinforcement is used, are sheet metal gauges, dimensions and spacing correct and is sheet metal galvanized? YES/NA NO
  - On supply ducts, is reinforcing member on the female side of the shiplap joint? YES/NA NO
  - On return ducts, is reinforcing member on the male side of the shiplap joint? YES/NA NO
  - On return ducts, are sheet metal channel reinforcements attached to ducts with screws and washers, or with 2" x 6" (50mm x 150mm) clips when located at circumferential joint? YES/NA NO

**Hangers and supports: See NAIMA FGDCS, Section VI.**
- Are hangers installed in accordance with the hanger schedule published in NAIMA FGDCS, Section VI? YES/NA NO
- Are hanger designs in accordance with those shown in the NAIMA standard? YES/NA NO
- Are accessories that add weight to the system separately supported so as not to stress the system? YES/NA NO
- Are vertical risers limited to systems serving two stories and supported on 12 foot (3.7 m) (max.) centers? YES/NA NO
  - If formed sheet metal reinforcements are used as hangers, are attachments within 6" (150mm) (nom.) of duct sides? YES/NA NO
- Are all fittings supported by hangers in accordance with NAIMA FGDCS, Section VI? YES/NA NO
- In humid climates, is system separated at least 1" (25mm) within crawl space or above ceiling insulation? YES/NA NO