

**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.

Project name and number \_\_\_\_\_  
 HVAC contractor \_\_\_\_\_  
 Mechanical contractor \_\_\_\_\_  
 General contractor \_\_\_\_\_  
 Engineer \_\_\_\_\_ Checklist compiled by \_\_\_\_\_ Date \_\_\_\_\_

**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)

**General**

- |   | YES/NA | NO  |
|---|--------|-----|
| ___ Is fibrous glass duct system installed under conditions permitted in NAIMA manual, pages 1-6 and 1-7? | ( )    | ( ) |
| ___ Is system operating within the design limitations for which it was built?                             | ( )    | ( ) |
| ___ Have all tears or punctures of facing material been repaired using proper techniques?                 | ( )    | ( ) |
| ___ Are all sheet metal accessory items galvanized or plated?   | ( )    | ( ) |

**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 2 1/2" (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?   | ( ) | ( ) |

	YES/NA	NO
<b>Slip-in heaters:</b> 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?	( )	( )
<b>Access doors:</b> See FGDCS, pages 3-26 and 3-27.		
___ Is installation in accordance with NAIMA Standard?	( )	( )
<b>Grilles, diffusers, registers:</b> 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.)	( )	( )
<b>Unit connection:</b> See NAIMA FGDCS, page 3-30.		
___ Are connections to unit or sheet metal ducts in accordance with NAIMA manual standards? (Securing duct to unit flange without mechanical fasteners is insufficient.)	( )	( )
<b>Closure: See NAIMA FGDCS, Section IV.</b>		
___ Are all longitudinal seams and circumferential joints properly taped or closed with glass fabric and mastic?	( )	( )
___ Is the closure system listed under UL 181A, Parts I (P), II (H), or III (M)?	( )	( )
___ Are staples of the outward clinching type?	( )	( )
___ When staples are not used, are 8" (200mm) (min.) tape tabs of approved type used in place of staples? (Tab spacing requirements are 12" (300mm) on centers, minimum 1 per side.)	( )	( )
___ Are staples or tape tabs correctly spaced on circumferential joints?	( )	( )
___ Are all pressure sensitive tape closures made with tape of proper width, rubbed down adequately, with staples or scrim in facing clearly visible?	( )	( )
___ Are heat activated closures applied correctly, as shown by changing dot color?	( )	( )
___ Does tape show manufacturer name, UL 181A nomenclature, and date code?	( )	( )
___ If glass fabric and mastic are used, is the mesh of the glass fabric completely filled with mastic?	( )	( )
<b>Reinforcement: See NAIMA FGDCS, Section V.</b>		
___ Is reinforcement system of a recommended type (formed metal channel, tie rod, or both)?	( )	( )
___ Is tie rod wire galvanized, and 12 gauge?	( )	( )
___ Is tie rod spacing correct according to duct span, board type, and static pressure?	( )	( )
___ Are tie rod washers 2½" (64mm) square or 3" (76mm) diameter, of galvanized or plated steel, and of proper thickness?	( )	( )
___ Do tie rod washers have turned edges facing away from duct board so they will not cut into it?	( )	( )
___ If tie rods reinforce a butt joint, are they used on both sides of the joint?	( )	( )
___ Is tie rod termination one of those documented in NAIMA FGDCS, or by manufacturer's recommendations?	( )	( )
___ Are sag support devices used on ducts of 48" (1220mm) span or greater, to support top panels?	( )	( )
___ Do tie rods run straight through ducts and not at angles except as provided for in reinforcing certain fittings?	( )	( )
___ Are heels of tees and elbows, and end caps, reinforced when necessary to meet NAIMA FGDCS, Section V requirements?	( )	( )
___ When formed sheet metal channel reinforcement is used, are sheet metal gauges, dimensions and spacing correct and is sheet metal galvanized?	( )	( )
___ On supply ducts, is reinforcing member on the female side of the shiplap joint?	( )	( )
___ On return ducts, is reinforcing member on the male side of the shiplap joint?	( )	( )
___ 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?	( )	( )
<b>Hangers and supports: See NAIMA FGDCS, Section VI.</b>		
___ Are hangers installed in accordance with the hanger schedule published in NAIMA FGDCS, Section VI?	( )	( )
___ Are hanger designs in accordance with those shown in the NAIMA standard?	( )	( )
___ Are accessories that add weight to the system separately supported so as not to stress the system?	( )	( )
___ Are vertical risers limited to systems serving two stories and supported on 12 foot (3.7 m) (max.) centers? If formed sheet metal reinforcements are used as hangers, are attachments within 6" (150mm) (nom.) of duct sides?	( )	( )
___ Are all fittings supported by hangers in accordance with NAIMA FGDCS, Section VI?	( )	( )
___ In humid climates, is system separated at least 1" (25mm) within crawl space or above ceiling insulation?	( )	( )