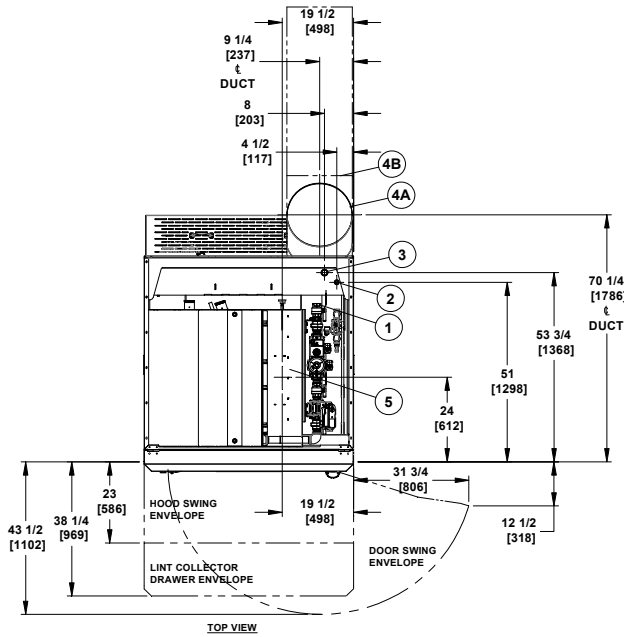
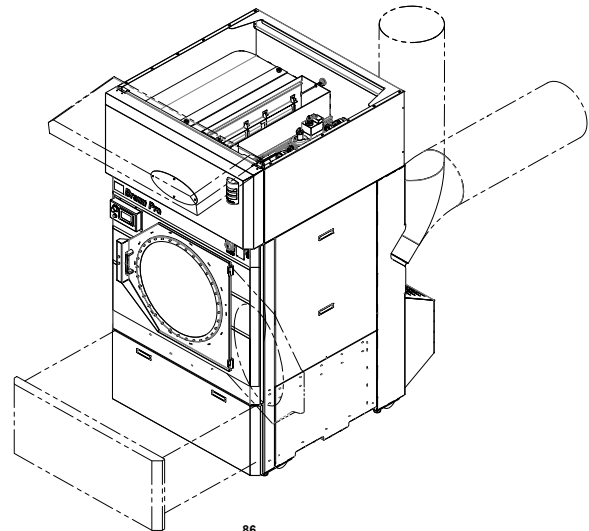
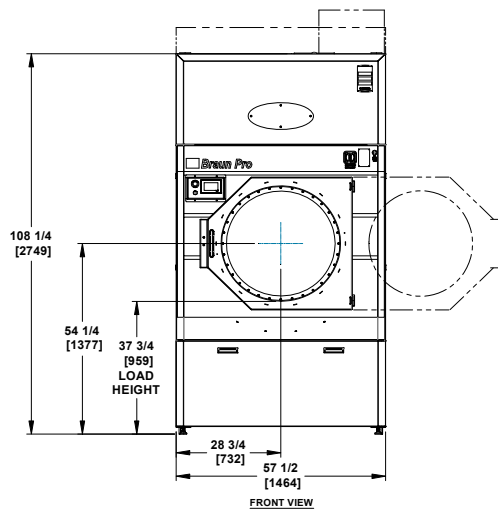
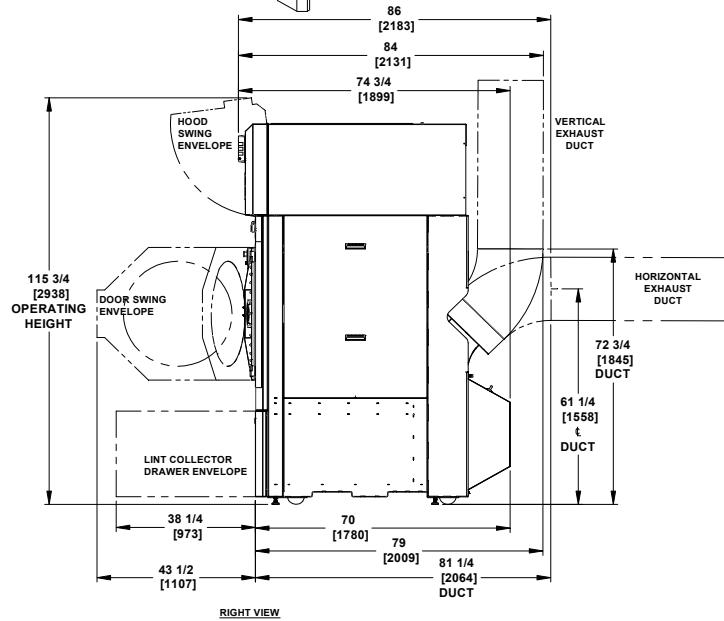
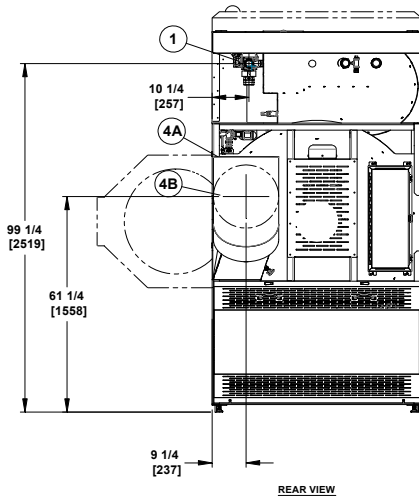
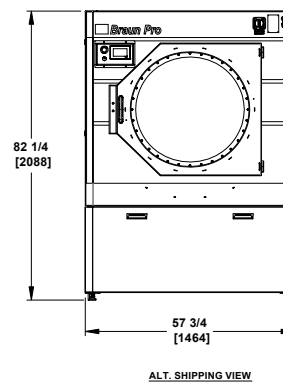






Braun Prime - NGF

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RECOMMENDED CAPACITY

Terry: 150 lbs clean dry weight [68 kg]

Blended Fabric: 150 lbs clean dry weight [68 kg]

Barrier Fabrics: 150 lbs clean dry weight [68 kg]

(ISO Gowns, non-breathable material, etc.)

*Running under 150 lbs [68 kg] clean dry weight with any product may result in reduced dryer performance and efficiency

**Running over recommended capacities may result in poor dryer performance and reduced efficiency

OPENING REQUIREMENTS TO RECEIVE UNIT

Height: 109" [2,769mm] Width: 58" [1,473mm]

Refer to rigging instructions in O&M manual

SPECIFICATIONS

Gas Models NGF

① Gas supply connection	1-1/2"NPT
Natural gas supply pressure	9" w.c. [230mm wc]
Propane gas supply pressure	4" w.c. [102mm wc]
Burner firing range, NGF (BTU/HR x 1000)	70 to 1400
Nominal firing range, NGF (BTU/HR x 1000)	800
Ignition type	Direct spark

Braun Prime Models

Basket volume (52"dia. x 42"deep)	52 ft ³ [1.42 m ³]
Door opening diameter	33" [838mm]
Load/unload height	37 3/4" [959mm]
Minimum dryer spacing, center to center	57 1/2" [1,464mm]
Maximum machine depth	86" [2,183mm]

SHIPPING WEIGHTS/SIZES

(Does not include skid dimensions unless noted)

Fully assembled/No Disassembly	108 1/2"H x 57 3/4"W x 75"D [2756mm x 1467mm x 1905mm]
Weight	2,800 lbs [1,270 kg]
Optional 3 piece disassembly	
Shell dimensions	82 1/2"H x 57 3/4"W x 75"D [2096mm x 1467mm x 1905mm]
Shell weight	2200 lbs [998 kg]
Burner duct dimensions	32 1/2"H x 42"W x 52 1/2"D [826mm x 1067mm x 1334mm]
Burner duct weight	510 lbs [703 kg]
Top enclosure	27"H x 57 3/4"W x 62 3/4"D [686mm x 1467mm x 1594mm]
Top enclosure weight	90 lbs [41 kg]

Additional break down is available on the shell if necessary. Contact sales.

SPECIFICATIONS CONTINUED

② Water supply (Fire suppression system) (40psi minimum)	3/4"NPT
⑤ Air intake duct connection (optional)	11 1/4" x 39" [286mm x 991mm]
Air intake duct size	SEE PAGE 3
④A Exhaust duct connection vertical	18" diameter [457mm]
④B Exhaust duct connection horizontal	18" diameter [457mm]
Exhaust duct volume	4,000cfm [113m ³ /min]
Exhaust duct size	SEE PAGE 3
Maximum external duct total static pressure allowed	1/2"wc [13mm wc]

*- Maximum exhaust duct length is 50ft. not including elbows or offsets, at 18"Ø. Longer duct runs can be made, or additional fittings added, but duct diameter must be adjusted.

LINT COLLECTION

On-board-

Single screen with #62 stainless steel screen mesh, single stage. Includes 2 x 2 mesh support screen. 1,992 in.²
[1.29m²]

FLOOR LOADING

Weight of dryer assembly *	2,800 lbs [1,270 kg]
Weight of operational loaded dryer (at rated capacity and 60% moisture retention)	3,240 lbs [1,470 kg]

*- Does not include weight of ducting or utility connections. See notes on ductwork. Ductwork shall be supported independently of the dryer duct connections.

FOUNDATION

Floor must be able to support machine, suggested minimum 6", 2500psi concrete.

Customer is responsible to meet all Local, State, and Federal Code requirements, to include obtaining any applicable permits to install or operate this equipment.

③ ELECTRICAL SPECS

	208/3/60	240/3/60	480/3/60
Conduit Connection	1 1/4"	1 1/4"	1 1/4"
Machine Disconnect (Internally Mounted Circuit Breaker) (Amps)	63	63	32
Machine Full Load Amps (FLA)	34	30	14
MAIN BLOWER	10HP		
BASKET MOTOR	3HP		
<ul style="list-style-type: none">● Grounding: Ground machine to an earth ground (zero potential) per National Electric Code (NEC) section 250 and any applicable local codes. Use a ground wire sized in accordance with NEC Table 250.122. Do not rely on conduit, machine anchorage, etc. Connect the ground wire between the ground lug on the incoming power junction box on the machine and the external disconnect box or other location as required to assure a reliable earth ground.● Branch Circuit Protection: Size external fuses or circuit breakers per the recommended minimum branch circuit requirements listed above. Installation of this branch circuit must be in accordance with the National Electric Code (NEC) and any applicable local codes.<ul style="list-style-type: none">○ Use only Dual Element (Time-Delay) fuses FRN (up to 250V), FRS (250 to 600V).○ If an inverse time circuit breaker is to be used instead of fuses, it should have the same characteristics as FRN/FRS type fuses.● Wire Sizing: Wire shall be sized in accordance with the National Electric Code and any applicable local codes. The required wire size will vary with the length of the wire run as well as any specific local codes. The use of THHN type copper supply conductors with a minimum of 90 deg C insulation is strongly recommended.			



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EQUIPMENT SPECIFICATION

BRAUN PRIME-NGF DRYER

General-

Basket size	52" dia. x 42" deep [1,321 x 1,067 mm]
Cylinder volume (Gross)	52 ft ³ [1.42 m ³]
Recommended capacity	150 Lbs [68 kg]
Cylinder opening (Usable)	33" [838 mm] Dia.
Basket rotation speed (fixed)	32rpm
Basket motor size	3hp [2.24 kW]
Main blower motor size	10hp [7.46 kW]
Overall dimensions (including access and operating envelope)	Refer to page 1

Basket Drive-

Trunnion diameter 2" dia. [59 mm]

Shell-

Construction Heavy gauge carbon steel welded housing and rear drive motor cabinet.
Internal lint collector Standard
External lint collector Optional
Lift off faceplate for easy, no rigging required, to basket and seals.
Removable burner housing contains burner, gas train, fire suppression plumbing.
Removable head includes low voltage control panel.
Removable faceplate for access to dryer basket and front seal.
Main blower supported on independent support/drive shaft; belt driven.

Blower-

Blower wheel is heavy gauge paddle, non-clog rated, that does not require regular cleaning.

Door-

Large tempered glass observation window.
Window glass seal is shielded from rotating goods.
Replaceable door to cabinet seal.
Free swinging, stainless steel door hinges
Door lock keeps door closed even on oversize loads

Basket-

Type t-304 Stainless steel perforated panels and ribs, standard welded construction
Heavy structural tube steel basket trunnion
Optional non-stick coatings available

Electrical/Controls-

Touch screen PLC control, easy operator access
Dry/cool by time or temperature
Both visual and audible operator notification
100 selectable user defined formulas and customer specific naming
Separate line voltage and control voltage panels.
Plug and play harnesses for electrical components
Ambient, inlet, and exhaust temperature probes
Over temperature safety
Split high and low voltage control boxes for arc flash protection

Fire Suppression-

Automatic water valve activation
Manual water valve override
Standard on all Braun Dryers.

INSTALLATION NOTES

1. All dimensions shown are inches. Millimeters are shown in brackets [].
2. These specifications are subject to change without notice. Please contact G.A. Braun for verification of, or to obtain the latest release.
3. Mechanical contractor shall install the provided main gas pressure reducing regulator and CSA approved gas shut off/lock out valve included with each dryer, for each dryer installed. Failure to do so may result in equipment damage, startup delays, or unsatisfactory dryer performance.

DUCTWORK- Reference Appendix A in the Operation and Maintenance Manual for specific ductwork requirements.

1. Ductwork sizing is critical. A qualified mechanical contractor or engineer should size the ductwork. Failure to follow good duct design practices will result in improper and poorly functioning equipment.
2. The duct connections on the equipment do not indicate final duct sizes. The ducts must be sized to provide adequate air flow to and from the dryer.
3. Air volume in an industrial dryer is much higher than a conventional HVAC system. Industrial dryers may move as much as 14,000CFM of turbulent air. Check the technical specifications for the correct dryer airflow and static pressure requirements.
4. Careful consideration must be given to the ductwork design. Airflow through the dryer is not smooth or uniform. The tumbling process inside the dryer will cause the air flow to surge. There will be periods of full air volume flow followed by sudden nearly full blocked air flow. The interval between periods of full and zero flow is just a few seconds. The volume of the air the dryer is moving is significant. Suddenly stopping an air volume this size causes the air to compress and will put significant pressure on the ductwork (Intake air duct). The same is true when the air is released. The compressed air behind the blockage and the power in the main blower suddenly release an excess air amount into the ductwork (Exhaust air duct). The closest analogy to this is when you kink a garden hose, you can feel the hose expand behind the kink, and the water coming out of the hose stops. When the kink is released, the sudden surge from the hose is greater than the original flow because the hose has to return to its original size. In this analogy, the kink is the goods tumbling in the dryer and the hose is the ductwork going to and from the dryer. The duct design must resist and withstand the pressure the turbulent air will put on it.
5. In addition to ductwork, restricted ducting puts stress on the lint collection system. The restriction can make the air flow even more turbulent. The internal lint collection system is a single pass system. That means the exhaust air only passes through the lint collection screen once, before exiting the dryer to atmosphere. The screen collects approximately 85% of the lint in the exhaust air stream. As more lint accumulates on the lint collection screen, the amount of lint bypassing the screen gradually decreases. At the end of the dry cycle, the lint screen is collecting almost all the lint expelled by the tumbling goods. Turbulent airflow causes the collected lint to be constantly lifted from the screen and re-deposited, effectively beating it against the collection screen. The more turbulent the air flow the greater the frequency and intensity of the beating. The beating action will release even more lint into the exhaust air stream exiting the dryer and expelled to atmosphere.
6. Do not exceed a total duct system static pressure of .5 in. w.c.. This is the combined static pressure of the exhaust and inlet duct. (TOTAL INLET DUCT SP"w.c.)+(TOTAL EXHAUST DUCT SP"w.c.)= TOTAL SYSTEM SP. Duct static pressure in excess of the rated amount will cause operational issues, including but not limited to, ignition failures, frequent inlet and/or exhaust over temperature alarms, unsatisfactory or increased dry time, increased utility consumption, possible damage to external ductwork, and significantly reduce equipment life.



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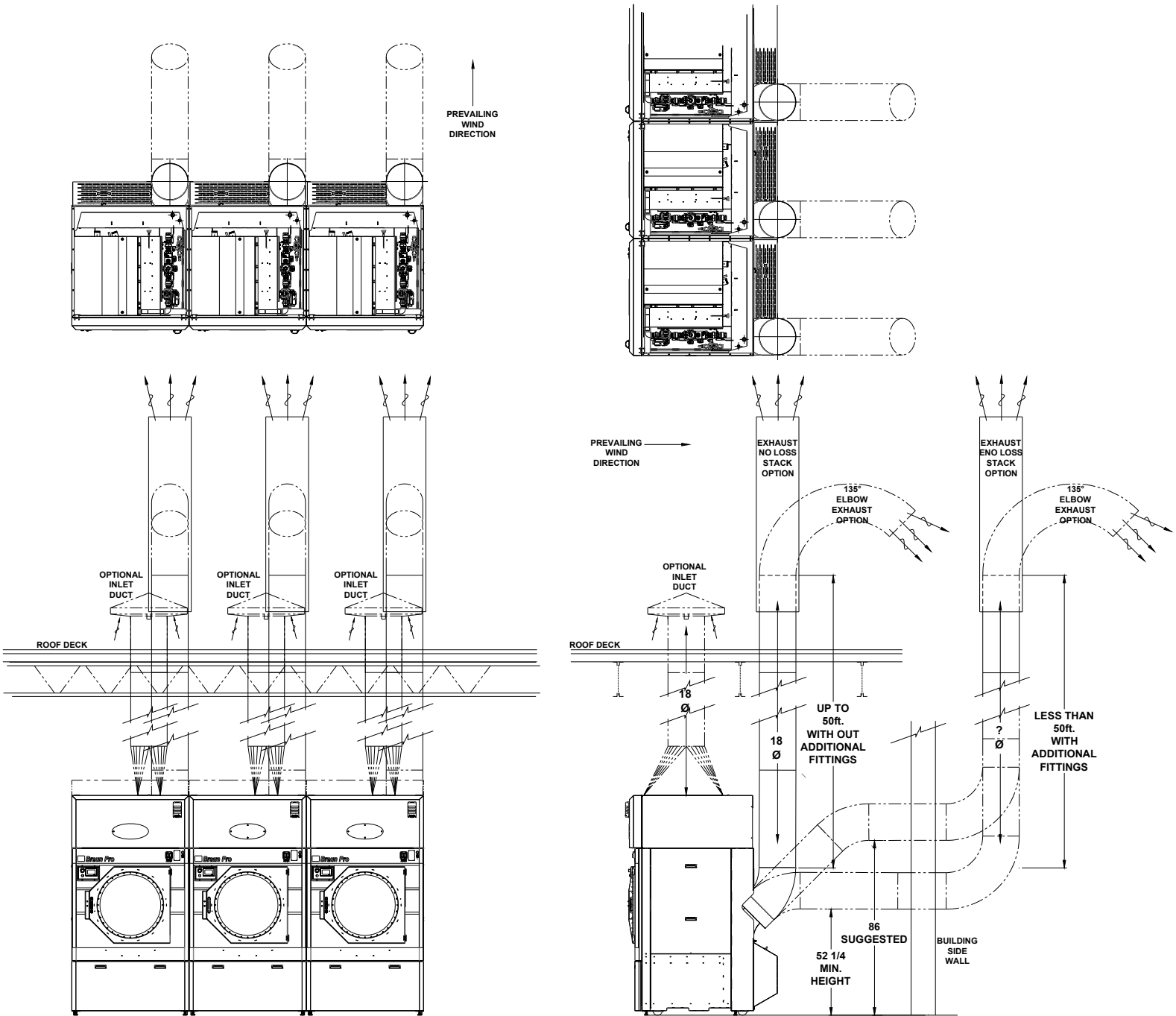
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7. In some cases, by preference or necessity, the dryer inlet air will not be ducted. Instead, the air may come directly from inside the building. Makeup air will have to be ducted into the building to account for the air that is pumped out by the dryer, and other equipment exhaust. Refer to the equipment specifications to determine the amount of building makeup air required as indicated by the EXHAUST DUCT VOLUME. The total number of machines drawing from inside air will determine the total makeup air volume required. Do not overlook the significance of providing proper makeup air. Inadequate makeup air will produce some of the same results as static pressure above the rated amount. It can also result in possible direct or indirect injury to employees, reduce performance of building heating and cooling systems or make them inoperable, degrade building working environment, and reverse the venting of dangerous exhaust gases on other gas fired equipment, or process equipment in the building. If the lack of makeup air is significant enough it could possibly impact the structural integrity of the building.
8. Do not install any type of screen over the ends of the exhaust or inlet ducts.
9. Roof penetration and flashing/curb is by owner. The type and style of roof penetration weather protection for the dryer ducting is best determined by the roof manufacturer, and/or mechanical contractor.
10. Minimum duct material shall be galvanized 18ga construction, for top inlet and exhaust models. 16ga duct material for rear exhaust models on the first 20ft of exhaust duct connection from the blower discharge. The 16ga material gives some protection against impact, either internal or external. After 20ft, 18ga ducting is okay. If using square/rectangular duct to transition to an external lint collector, a heavier gauge material may be needed to include bracing support on the square/rectangular ductwork. G.A. Braun discourages the use of square ductwork, but if used, it must be adequately supported to withstand the normal surging tendencies of the industrial dryer. Stainless steel ducting is not required. SMACNA rules for high pressure duct construction SHALL apply in all cases.
11. Round (spiral) duct is recommended over square or rectangular ducting. Square and rectangular ducts tend to "oil-can" and produce excess noise. The seams will become brittle and break over time if the oil-canning is excessive. These ducts tend to build lint internally, more so than round duct. If square/rectangular ducting is used, responsibility for structurally bracing this ductwork to prevent oil-canning or breakage is the sole responsibility of the contractor installing said ductwork. G.A. Braun will assume no responsibility for square/rectangular ductwork breakage at any point during its life span.
12. Support ductwork independently of the dryer duct connections. This will help prevent sound transmission from the equipment to the ductwork. The dryer is not designed to bear the weight of the ductwork. Consult local codes regarding proper duct support, and any additional support or bracing that may be required, especially for seismic conditions that may exist in your area.
13. Roof mounted ductwork, including intake or discharge stacks, may have minimum bracing requirements determined by the roofing contractor and/or local codes. Consult local codes.
14. Use of a zero or no-loss stack above the roof is recommended, unless ducting to a second stage lint collection device located above the roof line, or if the equipment is installed in an area that receives excessively heavy rain storms. If you live in an area that receives exceptionally heavy rain storms, consult with an experienced local engineer that can design an appropriate no-loss stack or recommend a different type of stack that is more favorable to your weather conditions. A no-loss stack can be used on both the inlet and exhaust ducts. Maintain at least 5ft. of separation between the ends of the stacks.
15. No-loss stacks are typically sized two (2) inches larger in diameter than the exhaust or inlet duct diameter and will overlap the internal duct by at least 12 inches. The length of the no loss stack is 4x's the duct diameter and shall be no less than 10ft. in length as measured from the end of the internal duct. (Ex. 26in. diameter duct x 4 = 104in./12 = 8.6ft. The 26in. diameter example duct will have a no-loss stack diameter of 28in.) The added length will not impact the duct static pressure and will give some added resistance to rain/snow entering the internal exhaust duct. If the no-loss stack is too short, it will not properly protect the intake duct from rain or snow.
16. A goose neck on the exhaust and a conical weather cap on the inlet are acceptable. So is a goose neck on the inlet duct and no-loss on the exhaust. Size the ductwork accordingly to account for the restrictions these will add to the duct system. A goose neck on either the inlet or exhaust duct greatly increases the static pressure in the duct.
17. For dryers that are directly exhausted to atmosphere the exhaust duct should be sized so the air velocity does not fall below 2,400 ft./min. This will help keep any lint collector bypass material from settling out in the ductwork. Exhaust air duct velocity MUST not exceed 3,500 ft./min. High exhaust duct velocities at the discharge will create a lot of noise that may be objectionable. Failure to keep airflow within these specified limits will void any warranty support of said dryer.
18. For dryers that are connected to an external lint collector the exhaust duct should be sized so the air velocity does not exceed 1,800 ft./min. in the ductwork leading up to the lint collector. After the lint collector, the exhaust air duct velocity MUST not exceed 3,500 ft./min. High exhaust duct velocities at the discharge will create a lot of noise that may be objectionable. Failure to keep airflow within these specified limits will void any warranty support of said dryer. Pay attention to the internal static pressure of the lint collector. This is part of the duct design total system static pressure calculation.
19. The prevailing wind direction in your area can affect the discharge direction of the free exhaust air. Goose neck and mitered elbow exhaust ducts require special attention. They should not face into the prevailing wind. Be careful not to exhaust one dryer directly toward the inlet of another dryer, or other equipment fresh air intakes. No loss exhaust stacks are not affected by wind direction.
20. The use of a goose neck on the intake duct is affected similarly to the exhaust duct (See section 17). An intake facing into the wind can cause trouble with ignition or the ability of the dryer to run. Regardless, using a goose neck on either the inlet or exhaust duct greatly increases the static pressure in the duct.
21. Exhaust discharge can be harmful or dangerous. Pay attention to the proximity of other equipment to the dryer exhaust discharge (This should apply to any equipment with high exhaust discharge temperature). This includes but is not limited to roof top air handling equipment, roof vents, and roof access hatches. Avoid discharging into or near these. A barrier may be required to isolate and protect those items that may be damaged by, or create a danger to, if the exhaust discharge is allowed to blow towards/into them.
22. All elbows shall be long radius and designed with a center line bend radius of at least 2x's.
23. On models with coaxial ductwork, the exhaust duct is inside the inlet duct. Size the exhaust duct first, and then the inlet duct. Do not forget to subtract the area of the exhaust duct from the area of the inlet duct. Do not forget to add the static pressure to the inlet duct from the exhaust duct (Friction from the incoming air on the internal exhaust duct). Failure to do so will cause the inlet duct to be undersized. Undersized ductwork will result in unsatisfactory operation of the dryer.
24. The pictures and drawings below give an example of ductwork installations specific to Braun Dryers. This is an example only, and does not represent your specific installation.



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BRAUN PRIME DRYER DUCTING POSSIBILITIES