

35 ft	4 in	12 mo	No Screen
IRC max equivalent length	Required duct diameter	Max cleaning interval	Cap rule (IRC 504.4)

SECTION 1 — Pre-Installation Code Check

- Duct material is rigid galvanized steel or listed semi-rigid aluminum flex (transition only)

Foil accordion, plastic, and vinyl duct are prohibited by IRC 504.2

- Minimum 4-inch inside diameter throughout the entire run

- Calculated equivalent length is 35 feet or under

Use the calculator at dryerventguide.pages.dev/tools/duct-length-calculator.html

- Each 90° elbow accounted for as 5 ft equivalent; each 45° as 2.5 ft

- Flex transition from dryer to wall stub-out is 8 feet or less

- Dryer manufacturer's installation manual reviewed — max duct length confirmed

Manufacturer's limit governs when more restrictive than IRC

- Gas dryer: combustion air supply for laundry space is adequate

Minimum 1-inch door undercut or dedicated provision per mfr. instructions

- Termination location identified — meets 3-ft clearance from all openings

Gas dryers: additional clearance from gas meter required (typically 10 ft)

- Penetration location confirmed clear of structural members, wiring, plumbing

Use stud finder in wiring-detection mode before cutting

SECTION 2 — Post-Installation Inspection

- All duct joints sealed with metallic foil tape — 2 full wraps minimum

Standard gray duct tape fails at dryer temperatures — not acceptable

- No sheet-metal screws penetrating inside the duct airstream

Screw tips catch lint and create blockage points

- Duct is supported every 4 feet or less — no sag between supports

Sagging duct creates low points where lint and condensate accumulate

- Fire-stop sealant applied at all wall and floor penetrations (UL-listed intumescent)

Standard silicone caulk does not meet fire-stop requirements

- Duct pitches slightly toward exterior (approx. 1/8 in. per foot minimum)

Ensures condensate drains out rather than back toward the dryer

- Duct in unconditioned space (crawl space, attic) is insulated — R-4 to R-8

Required in cold climates; best practice in all climates

- Termination cap installed — gravity or spring damper, no screen

Screened caps are prohibited by IRC 504.4

- Cap flange sealed to exterior siding with exterior-grade silicone

- Cap damper swings freely under gravity and closes fully when dryer is off
 - Booster fan (if installed): is listed for dryer exhaust; interlock wired; mfr. authorizes use
- All three conditions must be met — IRC 504.6.2*

SECTION 3 — Operational Verification (After Each Install or Cleaning)

- Dryer reconnected (power restored or gas valve open)
- Run dryer with a test load — observe from outside within 2 minutes
- Termination cap opens fully within first minute of dryer operation
Cap barely opening = restriction still present in the system
- Strong, clearly warm airflow felt at cap — hold hand 4–6 inches from opening
Weak flow = blockage or over-limit run — investigate before normal use
- No air leaking at duct joints, wall penetration, or cap flange
Any visible lint dust at a joint means the joint is not sealed
- No burning or musty smell during first 10 minutes of operation
Burning smell = stop immediately; potential lint scorching near heat source
- Laundry room humidity level does not rise noticeably during cycle
Elevated humidity = exhaust not exiting through duct

SECTION 4 — Annual Cleaning Checklist

- Clean lint trap — before this cleaning and before every load going forward
- Unplug dryer (electric) or close gas shutoff valve (gas) before disassembly
- Disconnect and clean flex transition duct — inspect for kinks, damage, prohibited material
Replace if foil accordion type — prohibited material
- Vacuum dryer exhaust outlet (the 4-inch port on back of dryer)
- Insert cleaning rod from interior wall stub-out — full run length, rotating brush
- Insert from exterior cap end as well — working from both ends improves results
- Remove cap — clean interior, check damper pivot, inspect for damage or screen
- Re-caulk cap flange perimeter if existing caulk is cracked or absent
- Reinstall cap — confirm damper closes fully under gravity
- Reconnect transition duct — seal stub-out joint with metallic foil tape
- Run operational verification (Section 3 checklist)
- Record cleaning date, condition found, and any actions taken in log below

SECTION 5 — Blockage Warning Signs (Clean Immediately if Present)

Stop using the dryer and clean / inspect the vent if any of these are present:

- Drying cycle time has increased by 15+ minutes vs. baseline
- Clothes are hot but still damp at cycle end
- Burning or musty smell during first minutes of a cycle
- Exterior cap barely opens or airflow feels weak
- Back of dryer housing is very hot to the touch during operation

- Laundry room is unusually humid or condensation on windows during cycle
- Lint visible around the dryer-to-wall connection
- Dryer stopped mid-cycle (thermal protector tripped)

SECTION 6 — Maintenance Log

Record every cleaning or inspection below. Keep this document with your home maintenance records.

Date	Method (DIY/Pro)	Condition Found	Actions Taken	Next Due