Circular Spiral Duct Seam Inspection Checklist

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Project	Location	Status

Date	Completed by

Duct Identification

No.	Done	Check / Requirement	Result	Notes / Evidence
1	☐	Record the duct section's identifier, drawing reference, or installation location so inspection results can be traced to that section.		

Seam Configuration

No.	Done	Check / Requirement	Result	Notes / Evidence
2	☐	Confirm the actual seam configuration against the approved fabrication detail. Spiral duct normally has a helical lock seam; record and obtain clarification of any conflict with a requirement describing a longitudinal seam before accepting the configuration.		

Engagement Verification Basis

No.	Done	Check / Requirement	Result	Notes / Evidence
3	☐	Identify the approved seam profile and inspection method used to verify engagement. If concealed engagement cannot be established by that method, record it as unverified rather than inferring it from the exterior appearance.		

Sealing Applicability

No.	Done	Check / Requirement	Result	Notes / Evidence
4	☐	Record whether seam sealing is required by the project specifications and approved details, including the required location and extent. Resolve conflicting or missing requirements before accepting the sealing treatment.		

Inspection Access

No.	Done	Check / Requirement	Result	Notes / Evidence
5	☐	Identify the seam areas accessible for examination, including visible interior surfaces and duct ends. Record concealed or inaccessible areas separately from inspected areas.		

Continuous Seam Engagement

No.	Done	Check / Requirement	Result	Notes / Evidence
6	☐	Examine the full accessible seam length using the approved inspection method for continuous engagement matching the specified profile. Record gaps, lifted edges, separated folds, or other interruptions.		

Seam Terminations

No.	Done	Check / Requirement	Result	Notes / Evidence
7	☐	Inspect seam terminations at accessible duct ends for incomplete engagement, separation, or unraveling.		

Dents and Distortion

No.	Done	Check / Requirement	Result	Notes / Evidence
8	☐	Inspect the seam and adjacent duct wall for dents, crushing, or distortion. Record damage and evaluate its acceptability against the project requirements rather than assuming cosmetic damage is acceptable.		

Cracks and Openings

No.	Done	Check / Requirement	Result	Notes / Evidence
9	☐	Inspect visible interior and exterior surfaces along the seam for cracks, tears, or punctures.		

Corrosion and Coating Damage

No.	Done	Check / Requirement	Result	Notes / Evidence
10	☐	Inspect the seam and adjacent duct wall for corrosion and damage to any specified protective coating.		

Sealing Product

No.	Done	Check / Requirement	Result	Notes / Evidence
11	☐	Where sealing is required, verify the installed or proposed sealing product against the approved material submittal and its suitability for the duct material under the manufacturer's instructions.		

Surface Preparation

No.	Done	Check / Requirement	Result	Notes / Evidence
12	☐	For field-applied sealing, verify surface preparation against the sealing product manufacturer's instructions before application. If already concealed, record the preparation as unverified unless supported by an inspection record.		

Sealing Coverage and Dimensions

No.	Done	Check / Requirement	Result	Notes / Evidence
13	☐	Where sealing is required, check uninterrupted coverage over the specified seam extent and verify any specified width, thickness, or overlap against the approved detail and product instructions.		

Sealing Condition

No.	Done	Check / Requirement	Result	Notes / Evidence
14	☐	Inspect accessible sealing treatment for visible voids, cracks, peeling, or loss of adhesion. Use any additional adhesion verification method only when required by the approved inspection procedure.		

Curing Requirements

No.	Done	Check / Requirement	Result	Notes / Evidence
15	☐	Where the sealing product requires curing, verify documented application conditions and elapsed curing time against the manufacturer's instructions before any specified testing or service exposure.		

Defect Documentation

No.	Done	Check / Requirement	Result	Notes / Evidence
16	☐	Record each defect's type and location with a photograph or descriptive note sufficient to locate it for correction.		

Repair Reinspection

No.	Done	Check / Requirement	Result	Notes / Evidence
17	☐	Reinspect corrected defects against the applicable seam, surface-condition, and sealing requirements; record the result for each repair.		

Inspection Disposition

No.	Done	Check / Requirement	Result	Notes / Evidence
18	☐	Record the inspection outcome, identifying satisfactory checks, unresolved defects, and unverified areas. Do not mark unverified areas as passed; document the follow-up needed before final acceptance.		

Comments / Follow-up

Checklist guidance

A reliable spiral duct seam inspection starts with the approved fabrication detail, not an assumption about seam geometry. This checklist supports traceable evaluation of continuous engagement, damage-free surfaces, and specified sealing treatment while making inspection limitations explicit.

1. Establish the duct section's identity and review the approved fabrication detail, seam profile, inspection method, and applicable sealing requirements.

2. Use the approved checklist to examine accessible seam areas, terminations, and adjacent surfaces, recording limitations separately from findings.

3. Where sealing is required, assess the treatment and supporting records against approved details, material submittals, and manufacturer instructions.

4. Document defects, record repair reinspection results, and state the inspection disposition without treating unresolved or unverified areas as passed.

Tick the box when complete. Record Not done or N/A in Result and note any follow-up.