

SECTION 019913 - GENERAL REQUIREMENTS FOR DIVISIONS 26-WORK

The "Engineer of Record" for the work defined by Division 01 Sections 019913 is Salas O'Brien, 702 Oberlin Road, Suite 300, Raleigh, NC 27605 (919) 832-8118. The term "engineer," "architect-engineer," "engineer-architect," "A-E," "E-A," etc., when used in these Sections shall reference Salas O'Brien.



RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification sections, apply to this section.

The requirements specified herein shall govern all Sections in Division 26, whether stated therein or not.

Where items specified in the other sections of this Division conflict with requirements of this Section, the former shall govern.

REVIEW OF CONTRACT DOCUMENTS

The Contract Documents may represent imperfect data and may contain errors, omissions, conflicts, inconsistencies, code violations and improper use of materials. Such deficiencies will be corrected by the A-E when identified. The Contractor shall carefully study and compare the individual Contract Documents with each other and report at once in writing to the A-E any deficiencies the Contractor may discover. The Contractor shall require each subcontractor to likewise study the documents and report at once any deficiencies discovered. The Contractor shall resolve all reported deficiencies with the A-E prior to starting any work. **Any work performed prior to receipt of instructions from the A-E will be done at the Contractor's risk.** If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency, or omission in the Contract Documents without such notice to the A-E, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.

The Contractor shall be responsible for maintaining habitable structures under this Contract rainproof, and for making equipment and utility installations properly perform the intended function. If he is prevented from so doing by any limitations of the drawings or specifications, the Contractor shall immediately notify the A-E in writing of such limitations before proceeding with construction in the area where the problem or limitation exists.

DEFINITIONS

Electrical Work: Work required by this Contract as defined by specification Division 26.

Labeled: Appliances, equipment, materials or products to which has been attached a label, symbol, or other identifying mark of an organization acceptable to the North Carolina Building Code Council and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with identified standards or has been tested and found suitable for a specified purpose.

1 Listed: Appliances, equipment, materials or products included in a list published by an organization acceptable to the
2 North Carolina Building Code Council and concerned with product evaluation, that maintains periodic inspection of
3 production of listed equipment or materials, and whose listing states either that the equipment or material meets
4 appropriate designated standards or has been tested and found suitable for a specified purpose.
5

6 Concealed: Work within or behind various construction elements or in crawl spaces or trenches that is not exposed
7 to view when the project is complete.
8

9 Exposed: Not "concealed" as defined above, or anything exposed to view when the project is complete.
10

11 Wiring: Cable, raceways, fittings, mechanical supports, wire, junction boxes, device boxes, outlet boxes, switches,
12 cutouts, and related items.
13

14 **CODES, LAWS, REGULATIONS, AND STANDARDS**

15
16 Work on and for the project shall conform to requirements of each applicable volume of the *North Carolina Building*
17 *Code*; shall comply with the regulations of the N.C. Department of Labor, including the latest revisions and
18 interpretations of the *Occupational Safety and Health Act of North Carolina*; and be in accordance with all other
19 codes, laws, rules and regulations that apply to this project.
20

21
22 Codes, laws, regulations, and/or industry standards referenced in the Specification or on the Drawings shall be
23 considered to be part of the Project requirements. Applicable edition of the referenced volume is the edition that
24 is/was in effect at the time the construction permit was issued or at the time of approval of the Contract Documents by
25 the Authority Having Jurisdiction.
26

27 **QUALITY ASSURANCE**

28
29
30 The Contract Drawings indicate the extent and general arrangement of the Work. The Contractor shall coordinate the
31 Work under his Contract so as to avoid conflicts between his work and the work of other trades. He shall carefully
32 examine the Drawings and shall be responsible for the proper fitting of materials and equipment into the space
33 provided. If any departures from the Contract Drawings are deemed necessary by the Contractor, detail drawings of
34 such departures and the reasons therefore shall be submitted as soon as practicable to the A-E for his review. No
35 such departures shall be made without this review and written clarification or change order.
36

37 **If manufacturer recommended details or installation instructions differ from the contract drawings or**
38 **specifications, then the contractor shall notify the A-E immediately of any discrepancies.**
39

40 The Drawings and Specifications shall be considered supplementary, one to the other, so that materials and/or labor
41 indicated, called for, or implied by one and not the other shall be provided as though specifically called for in both.
42

43 Firestop Materials Codes and Standards: Comply with ASTM Standard E814 and applicable categories of UL's
44 current *Fire Resistance Directory*, Vol. I and II, for compliance with ANSI/UL Standard 1479.
45

46 Access Doors Fire-Resistance Ratings: Where fire-resistance rating is indicated for construction penetrated by
47 access units, provide Listed and Labeled units.
48

49 **SUBMITTALS**

50
51
52 Submittals shall demonstrate compliance with technical requirements by reference to each subsection of this
53 specification. Material and equipment schedules, catalog cuts, manufacturers' data and shop drawings, and field
54 working drawings as required by individual Sections shall be provided.
55

56 Shop drawings, technical data and other such submittals required by individual Sections of the Divisions listed above
57 shall be provided.
58

1 Equipment drawings, manufacturer's installation instructions as shipped with the equipment, field working and
2 location drawings, wiring diagrams, and coordination drawings shall be provided by the Contractor for items of
3 equipment, sleeves, foundations, curbs, wiring, ductwork, piping, etc., as necessary for information and coordination
4 of all trades. These drawings shall be provided sufficiently in advance of installation to avoid delays and removal and
5 reworking of installed work, and so as to provide information to other trades when and as required. No work shall be
6 done until these drawings have been coordinated by the Contractor.

7
8 Submittals shall be checked before submission by technically qualified employees of Contractor for accuracy,
9 completeness and compliance with Contract requirement. **All submittals shall be accompanied by the "Submittal
10 Cover Form" provided at the end of this Section, signed by Contractor.**

11
12 Contractor shall submit complete lists or schedules of all proposed sub-contractors and material suppliers, and of all
13 proposed construction materials and equipment. Materials and equipment lists shall be complete with trade names
14 and/or catalog numbers of each item. Processing of the second and subsequent Certificate for Payment will be
15 withheld until substantial portions of these lists have been submitted.

16
17 Products furnished shall be essentially the standard product of the manufacturer. Where two or more units of the
18 same class of equipment are required, these units shall be products of a single manufacturer.

19
20 Products proposed by the Contractor shall be new except where specifically noted otherwise. Contractor(s) shall
21 provide products only from manufacturers who have published data showing compliance with specified requirements
22 or who certify in writing to such compliance (including laboratory and/or in-place testing, if applicable). All electrical
23 products shall be both labeled and listed, as defined above. **Prior to purchase of major materials, equipment or
24 systems, submit manufacturer's data to the A-E for review as hereinafter specified.**

25
26 Products of the specified type and for the specified application offered by the Contractor(s) for use on this Project
27 shall comply with the following requirements:

28
29 Product shall have had satisfactory performance in applications of similar character to that specified for a
30 period of at least three (3) years.

31
32 Product shall be from an established national or regional manufacturer. The A-E's experience with the
33 manufacturer on prior projects relative to product performance, technical support, etc. may be taken into
34 account to establish suitability of the offered product for this Project.

35
36 Product shall be provided through an authorized representative of the manufacturer. The representative
37 shall be capable of providing technical support relative to the installation, operation, and maintenance of the
38 product. The A-E's experience with the representative on prior projects relative to product performance,
39 technical support, etc. may be taken into account to establish suitability of the offered product for this
40 Project.

41
42 Repair parts and service for the product shall be available within twenty-four (24) hours of notice.

43
44 **The manufacturer and his authorized representative shall furnish satisfactory evidence in support of these
45 conditions when requested. The A-E's decision relative to the suitability and acceptability of any product is
46 final and acceptance of this limitation is implicitly acknowledged by the contractor and the manufacturer
47 and/or his representative offering the product for use on this Project.**

48
49 Submittals shall demonstrate compliance with technical requirements by reference to each subsection of this
50 specification. Where a submitted item does not **comply fully** with each and every requirement of the specifications
51 the submittal shall clearly indicate such deviations by being marked "**NON-COMPLYING FEATURE**." This indication
52 shall be applied to the submittals at the appropriate location in a color contrasting with the remainder of the submittal.
53 Additional information that might assist the Engineer in product evaluation may be included with the submittal. This
54 information should indicate how a specific non-complying feature is believed by the Contractor to meet the intent of
55 the specification.
56

1 **It is the Contractor's responsibility to demonstrate compliance with the specifications and to clearly**
2 **indicate any features that do not meet the specifications. It is not the Engineer's responsibility to**
3 **identify non-compliance.** Substantial non-compliance, as determined by the Engineer, is grounds for
4 rejection of the submittal. Discovery of non-complying features that have not been properly identified as
5 such on submittals may require, at any stage of construction, the removal and replacement of the non-
6 complying item(s).
7

8 The A-E will review manufacturer's data with reasonable promptness. This review is only for general conformance
9 with the design concept of the project and general compliance with the information given in the Contract Documents.
10 Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance
11 with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an
12 assembly of which the item is a component. Contractor is responsible for dimensions to be confirmed and correlated
13 at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques,
14 sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for
15 performing all work in a safe and satisfactory manner. The Contractor is responsible for any delay caused by his
16 failure to observe submittals requirements and the time for completion of his Contract will not be extended because of
17 such delays.
18

19 The A-E's submittals review stamp categories shall be interpreted as follows:
20

21 Reviewed: Fabrication and installation or erection may be undertaken.
22

23 Exceptions indicated, revise and proceed: Fabrication and installation of erection may be undertaken.
24 However, Contractor shall comply with all notes or corrections indicated.
25

26 Exceptions indicated, revise and re-submit: Neither fabrication, installation, nor erection shall be undertaken.
27 Re-submit corrected copies for review. Corrections shall be limited to items marked, except that changes
28 required in order to coordinate the corrections indicated shall be made. All changes, other than those
29 indicated, shall be called specifically to the A-E's attention.
30

31 Rejected, re-submit: Neither fabrication, installation, nor erection shall be undertaken. Revise entire
32 submission to comply with information given in the Contract Documents and re-submit.
33

34 Submittals returned to the Contractor with the A-E's "reviewed" or "exceptions indicated, revise and proceed" stamp
35 need not be resubmitted, except that corrected copies of "exceptions indicated, revise and proceed" submittals shall
36 be furnished for record when requested.
37

38 Submittals returned to the Contractor with the A-E's "revise and re-submit" or "rejected, re-submit" stamp shall be
39 corrected to comply with Contract requirements and re-submitted to the A-E for review. The Contractor shall direct
40 specific attention, in writing or on re-submitted shop drawings, product data or samples, to revisions other than those
41 requested by the A-E on previous submittals.
42

43 Shop drawings of work that involves more than one subcontractor shall be coordinated by the Contractor and
44 submitted to A-E under one cover. No items shall be fabricated, nor any portion thereof shipped to site, prior to
45 receipt by the Contractor of all applicable submittals, including manufacturer's data, samples and shop drawings
46 bearing the A-E's "reviewed" or "exceptions indicated" stamp only.
47

48 Manufacturer's data submitted as required by the technical specifications sections or requested by A-E shall consist
49 of four (4) copies of certificates, schedules, catalog cuts, manufacturer's specifications and installation instructions for
50 each type of product or material. Include maintenance recommendations, fire ratings and other reports when
51 applicable to show compliance with the Specifications. When catalog cuts are submitted, the specific item to be
52 considered shall be identified. Items that are not so identified will be returned to the Contractor without action.
53

54 Firestop Systems: Submit data on products. Provide manufacturer's certification of UL classification(s)
55 required, including copies of UL systems listings and schedule defining each UL system proposed and the
56 applicable type of penetration.
57

58 Access Units: Submit manufacturer's technical data and installation instructions for each type of access
59 door assembly, including setting drawings, templates, instructions and directions for installation of
60 anchorage devices.

1 Contractor shall submit for review any samples required by the technical specification sections or that may be
2 requested by the A-E.
3

4 With each electrical testing and compliance submittal, Contractor shall submit evidence of compliance that each
5 manufactured item or component of electrically-operated equipment and that each fabricated assembly of electrically
6 operated equipment furnished complies with the testing requirements.
7

8 9 **USE OF BRAND NAMES**

10
11 Brand names, where scheduled as "basis of design," are to be considered for information purposes and are not
12 intended to be a product specification.

13 Where the Contractor proposes to use an item of equipment other than that indicated as basis of design that
14 may require redesign of the structure, partitions, foundations, piping, wiring, or any other part of the
15 mechanical, electrical, or architectural layout, all such redesign and all new drawings and detailing required
16 shall be prepared by the Contractor at his own expense and submitted for review by the A-E.
17

18 Where such deviation requires a different quantity and arrangement of ductwork, piping, wiring, raceway, or
19 equipment from that specified or indicated on the Drawings, the Contractor shall furnish and install any such
20 ductwork, piping, structural supports, insulation, controllers, motors, starters, electrical wiring and raceway,
21 and any other additional equipment required by the system, at no additional cost.
22

23 Brand names, where used as a product specification, are intended to denote the standard of quality required for the
24 particular material or product.
25

26 Where the term "equal" or "equivalent" is present, such specification does not restrict the Contractor to a
27 specific brand and equivalent products by other manufacturers may be acceptable. The term "equal" or
28 "equivalent" shall be interpreted to mean a material or product that is similar and equal in type, quality, size,
29 capacity, composition, finish, color, and other performance characteristics to the material or product
30 specified by brand name, and that, **in the opinion of the A-E**, is suitable for the same use and capable of
31 performing the same function as the material or product specified. **Proposed equivalent items must be
32 reviewed by the A-E before they are purchased or incorporated into the work.**
33
34

35 **EQUIPMENT SUBSTITUTIONS AND CHANGES/EXTRA COSTS FOR CHANGES IN BUILDING SERVICES**

36
37 Where the Contractor proposes to use an item of equipment other than that specified or detailed on the Drawings,
38 requiring any redesign of the structure, partitions, foundations, piping, wiring, or any other part of the mechanical,
39 electrical, or architectural layout, all such redesign and all new drawings and detailing required shall be prepared by
40 the Contractor at his own expense and submitted for review by the A-E.
41

42 Where such approved deviation requires a different quantity and arrangement of ductwork, piping, wiring, raceway, or
43 equipment from that specified or indicated on the Drawings, the Contractor shall furnish and install any such
44 ductwork, piping, structural supports, insulation, controllers, motors, starters, electrical wiring and raceway, and any
45 other additional equipment required by the system, at no additional cost.
46
47

48 It is the responsibility of the Contractor to notify the A-E in all cases where the requirements of proposed equipment
49 differ from the requirements specified, shown, or implied on the Drawings or within the Specifications. **Failure of the
50 Contractor to notify the A-E shall not relieve the Contractor of the responsibility of providing compatible
51 equipment at no additional cost as described above.**
52
53

54 **OPERATION AND MAINTENANCE DATA**

55
56 For each Division of the Work, provide four (4) copies of Operating Manuals, Maintenance Manuals, and Test
57 Reports, bound in suitable covers, to the A-E at least two (2) weeks **prior** to the final inspection of the project.
58

1 Each manual shall include a cover sheet listing the following:

2
3 Project name and location.

4
5 Division of Work covered by the manual.

6 Contractor data, including name, address, phone and fax numbers, and service contact information (24-hour
7 number, email address, etc.)

8
9 Date of project completion.

10
11 Each manual shall include a table of contents.

12
13 Operating manual: Provide all relevant information needed for day-to-day operation and management of the building
14 systems. Include the following for each system:

15
16 System Description: Identify the areas of the building the system serves, the locations of performance
17 checkpoints, the expected performance readings at the design load conditions and, where applicable, at
18 part-load conditions. The system's operation during the day, night, and weekend, as well as seasonal start-
19 up and shutdown, safety devices and their function, control devices and their function, pollution control
20 devices, etc., also shall be described. The function of the controls for individual systems shall be described
21 alongside the description of the system function.

22
23 Operating Routines and Procedures: Identify activities associated with the normal operation of systems and
24 equipment. Operating checklists and operating logs shall be provided for each system and all performance
25 standards shall be identified.

26
27 Seasonal Start-Up and Shutdown: List seasonal start-up and shutdown procedures, including any
28 "mothballing" procedures required.

29
30 Special Procedures: Special procedures related to environmental control, health and safety, productive
31 work environment, etc., shall be codified.

32
33 Troubleshooting Procedures: This section shall include questionnaires and diagnostics to allow users to
34 isolate probable causes of operating problems in an efficient manner.

35
36 Maintenance manual: The maintenance manual shall be divided into two parts:

37
38 Part I shall contain information related to the equipment data sheets, nameplate data, operating data, etc.
39 Include the original purchase order number; date of purchase; name, address, and phone number of vendor;
40 and warranty information.

41
42 Part II shall support a maintenance program. The manual shall contain information prepared by the
43 equipment manufacturers, but shall be supplemented by information provided by the Contractor. Each item
44 of equipment shall be identified and an individual "Equipment Maintenance Sheet" shall be prepared for
45 each, with the following information:

46
47 Description each system and system component, consisting of easily read schematic drawings
48 showing all components, identified to match Part I data, that requires maintenance.

49
50 Recommended preventative and predictive maintenance procedures and their recommended
51 frequency of application for each system component.

52
53 Recommended list of spare parts with part numbers and place(s) they can be obtained.

54
55 Copy of manufacturer's Installation instructions for each component.

56
57 Any other information requested by the A/E to support the operation and maintenance of the
58 equipment.

1 Test reports: Provide copies of the test protocols used in the construction and commissioning of the systems.
2 Arrange data so as to allow the results of ensuing tests to be easily added.
3
4
5

6 **PART 2 – PRODUCTS**

7 (NOT USED)
8
9

10 **PART 3 – EXECUTION**

11 (NOT USED)
12
13
14

SUBMITTAL COVER FORM

PROJECT: NC State Fairgrounds Midway Event Center
NC Department of Agriculture and Consumer Services

PROJECT NO.: 2023-03874 SCO#22-25408-02

TO: SALAS O'BRIEN
702 Oberlin Road, Suite 300
Raleigh, NC 27605

FROM: _____

_____ CONTRACTOR _____ SUBCONTRACTOR

We submit for your consideration the following product for the above project:

SPECIFICATION SECTION	SPECIFICATION PARAGRAPH	DESCRIPTION
_____	_____	_____

TYPE OF SUBMITTAL:

- _____ Specified Brand Product
- _____ Proposed Equivalent Product to Specified Brand
- _____ Product Meeting Performance Specification (No Brand Specified)

We warrant the following:

- a. We have personally investigated the proposed product, and determined that it is equal in all respects to that specified and/or performance specification requirements;
- b. We will provide the specified guarantee for this product;
- c. We will coordinate installation of this product into the work, making such changes as may be required for the work to be complete in all respects;
- d. We have clearly indicated by marking as "Non-Complying Feature" each and every requirement of the Specifications that this product does not meet;
- e. And, we waive all claims for additional costs related to this product which subsequently become apparent.

Attached hereto are complete technical data, including applicable laboratory reports, to demonstrate compliance with project requirements.

SUBMITTED BY:

SIGNATURE

DATE

SUBMITTAL REVIEW

**(SAMPLE FORM - ORIGINAL WITH COMMENTS WILL BE ATTACHED TO
SUBMITTAL BY A/E)**

PROJECT: _____

PROJECT #:

SUBMITTAL ID#:

SPECIFICATION PARAGRAPH:

DESCRIPTION:

Submittal has been reviewed only for conformance with design intent of the contract documents. See Section 019913 "GENERAL REQUIREMENTS FOR ENGINEERED WORK" for complete definition of Submittal Review.

- Reviewed
- Exceptions Noted - Revise & Proceed
- Exceptions Noted - Revise & Resubmit
- Rejected

DATE: _____

BY: _____

REVIEW COMMENTS:

THESE COMMENTS SHALL NOT BE REMOVED FROM THIS DOCUMENT

