

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)

NAME OF PROJECT: T & L COATS BUILDING #2 (FOUR TENANT UP-FIT)
ADDRESS: HIGHWAY 27 COATS ZIP CODE: 27527
OWNER/AUTHORIZED AGENT: ROBERT BARFOOT PHONE #: (910) 890-3256 EMAIL: WRBAREFOOT@YAHOO.COM
OWNED BY: CITY/COUNTY PRIVATE STATE
CODE ENFORCEMENT JURISDICTION: CITY COUNTY HARNETT STATE

LEAD DESIGN PROFESSIONAL: CRUSE & ASSOCIATES, P.A.

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE NO.	E-MAIL
ARCHITECTURAL	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
BUILDING	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
CIVIL	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
ELECTRICAL	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
FIRE ALARM	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
PLUMBING	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
MECHANICAL	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
SPRINKLER-STANDPIPE	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
STRUCTURAL (FOUNDATION)	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM
RETAINING WALLS >5' HIGH	CRUSE & ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	910-892-4429	RCRUSE@CRUSEASSOCIATES.COM

2018 EDITION NC BUILDING CODE: NEW BUILDING ADDITION RENOVATION
 1ST TIME INTERIOR COMPLETIONS
 SHELL/CORE-CONTACT THE LEAD INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES & REQUIREMENTS
 PHASED CONSTRUCTION-SHELL/CORE-CONTACT THE LEAD INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES & REQUIREMENTS

2018 NC EXISTING BUILDING CODE: PRESCRIPTIVE REPAIR CHAPTER 14
ALTERATION: LEVEL I LEVEL II LEVEL III
 HISTORIC PROPERTY CHANGE OF USE

CONSTRUCTED: (DATE) _____ CURRENT OCCUPANCY(S): (CH. 3) _____
RENOVATED: (DATE) _____ PROPOSED OCCUPANCY(S) (CH. 3): _____
OCCUPANCY CATEGORY (TABLE 1604.5): CURRENT: I II III IV
PROPOSED: I II III IV

BASIC BUILDING DATA:
CONSTRUCTION TYPE: I-A II-A III-A IV V-A
 I-B II-B III-B V-B

SPRINKLERS: NO PARTIAL YES NFPA 13 NFPA 13R NFPA 13D
STANDPIPES: NO YES CLASS I II III WET DRY
PRIMARY FIRE DISTRICT: NO YES FLOOD HAZARD AREA: NO YES
SPECIAL INSPECTIONS REQUIRED: NO YES (CONTACT THE LOCAL INSPECTION JURISDICTION FOR ADDITIONAL PROCEDURES & REQUIREMENTS)

GROSS BUILDING AREA:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3RD FLOOR			
2ND FLOOR			
MEZZANINE			
1ST FLOOR	7,000	7,000 UP-FIT	
BASEMENT			
TOTAL GROSS AREA: 7,000			

TOTAL BUILDING = 7,000 SQ. FT.
TENANT 1 = 1,750 SQ. FT.
TENANT 2 = 1,750 SQ. FT.
TENANT 3 = 1,750 SQ. FT.
TENANT 4 = 1,750 SQ. FT.

ALLOWABLE AREA
PRIMARY OCCUPANCY CLASSIFICATION(S):
ASSEMBLY A-1 A-2 A-3 A-4 A-5
BUSINESS
EDUCATIONAL
FACTORY F-1 MODERATE F-2 LOW
HAZARDOUS H-1 DETONATE H-2 DEFLAGRATE H-3 COMBUST H-4 HEALTH H-5 HPM
INSTITUTIONAL I-1 CONDITION 1 2
 I-2 CONDITION 1 2
 I-3 CONDITION 1 2 3 4 5
 I-4
MERCANTILE
RESIDENTIAL R-1 R-2 R-3 R-4
STORAGE S-1 MODERATE S-2 LOW HIGH-PILED
 PARKING GARAGE OPEN ENCLOSED REPAIR GARAGE
 UTILITY AND MISCELLANEOUS

ACCESSORY OCCUPANCY CLASSIFICATION(S): _____
INCIDENTAL USES (TABLE 509): _____
SPECIAL USES (CHAPTER 4-LIST CODE SECTIONS): _____
SPECIAL PROVISIONS (CHAPTER 5-LIST CODE SECTIONS): _____
MIXED OCCUPANCY: NO YES SEPARATION: _____ HR. EXCEPTION: _____

NON-SEPARATED USE (508.3) THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.
 SEPARATED USE (508.4) SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY, THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
1	BUSINESS	7,000	23,000	-	23,000

¹ FRONTAGE AREA INCREASES FROM SECTION 506.2 ARE COMPUTED THUS:
A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = _____ (F)
B. TOTAL BUILDING PERIMETER = _____ (P)
C. RATIO (F/P) = _____ (F/P)
D. W = MINIMUM WIDTH OF PUBLIC WAY = _____ (W)
E. PERCENT OF FRONTAGE INCREASE $\frac{1}{2} = 100[F/P - 0.25] \times W/30 = \text{_____} (\%)$
² UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.
³ MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (MAXIMUM 3 STORIES) (506.2).
⁴ THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH 406.5.4.
⁵ FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE ¹
BUILDING HEIGHT IN FEET (TABLE 504.3) ²	FEET 55	23'-8"	
BUILDING HEIGHT IN STORIES (TABLE 504.4) ³	STORIES 3	STORIES 1	

1. PROVIDE CODE REFERENCE IF THE "SHOWN ON PLANS" QUANTITY IS NOT BASED ON TABLE 504.3 OR 504.4.
2. THE MAXIMUM HEIGHT OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH TABLE 412.3.1.
3. THE MAXIMUM HEIGHT OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (W/REDUCTION)	DETAIL AND SHEET	DESIGN FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES	-	0	-	-	-	-	-
BEARING WALLS	-	-	-	-	-	-	-
EXTERIOR	-	-	-	-	-	-	-
NORTH	0	-	-	-	-	-	-
EAST	0	-	-	-	-	-	-
WEST	0	-	-	-	-	-	-
SOUTH	0	-	-	-	-	-	-
INTERIOR	-	0	-	-	-	-	-
NONBEARING WALLS & PARTITIONS	-	-	-	-	-	-	-
EXTERIOR	-	0	-	-	-	-	-
NORTH	0	-	-	-	-	-	-
EAST	0	-	-	-	-	-	-
WEST	0	-	-	-	-	-	-
SOUTH	0	-	-	-	-	-	-
INTERIOR	-	0	-	-	-	-	-
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	-	0	-	-	-	-	-
FLOOR CEILING ASSEMBLY	-	-	-	-	-	-	-
COLUMNS SUPPORTING FLOORS	-	-	-	-	-	-	-
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	-	0	-	-	-	-	-
ROOF CEILING ASSEMBLY	-	-	-	-	-	-	-
COLUMNS SUPPORTING ROOF	-	-	-	-	-	-	-
SHAFT ENCLOSURES-EXIT	-	-	-	-	-	-	-
SHAFT ENCLOSURES-OTHER	-	-	-	-	-	-	-
CORRIDOR SEPARATION	-	0	-	-	-	-	-
OCCUPANCY SEPARATION	-	-	-	-	-	-	-
PARTY/FIRE WALL SEPARATION	-	-	-	-	-	-	-
SMOKE BARRIER SEPARATION	-	-	-	-	-	-	-
TENANT/DWELLING UNIT/SLEEPING UNIT SEPARATION	-	-	-	-	-	-	-
INCIDENTAL USE SEPARATION	-	-	-	-	-	-	-

*INDICATE SECTION NUMBER PERMITTING REDUCTION

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
82'	UP; NS	NO LIMIT	42%

LIFE SAFETY SYSTEM REQUIREMENTS:
EMERGENCY LIGHTING: NO YES
EXIT SIGNS: NO YES
FIRE ALARM: NO YES
SMOKE DETECTION SYSTEMS: NO YES PARTIAL
CARBON MONOXIDE DETECTION: NO YES

LIFE SAFETY PLAN REQUIREMENTS:
LIFE SAFETY PLAN SHEET #, IF PROVIDED: LS-1 OF 1

ACCESSIBLE DWELLING UNITS N/A (SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING-SEE SITE PLAN-SEE SITE PLAN (SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	8' ACCESS AISLE	
	24	37	2			2

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIES			SERVICE SINK	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
TENANT 1	REQUIRED	-	-	1	-	-	-	1	*	*	*
BUSINESS	PROVIDED	-	-	1	-	-	1	*	*	*	*
TENANT 2	REQUIRED	-	-	1	-	-	1	*	*	*	*
BUSINESS	PROVIDED	-	-	1	-	-	1	*	*	*	*
TENANT 3	REQUIRED	-	-	1	-	-	1	*	*	*	*
BUSINESS	PROVIDED	-	-	1	-	-	1	*	*	*	*
TENANT 4	REQUIRED	-	-	1	-	-	1	*	*	*	*
BUSINESS	PROVIDED	-	-	1	-	-	1	*	*	*	*

*NCSBC 2902.6
SPECIAL APPROVALS
SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, ETC., DESCRIBE BELOW)

DESIGN LOADS: STRUCTURAL DESIGN-EXISTING BUILDING
SNOW (I_s) -
SEISMIC (I_e) -
LIVE LOADS: ROOF - PSF
MEZZANINE - PSF
FLOOR - PSF
GROUND SNOW LOAD: - PSF
WIND LOAD: BASIC WIND SPEED - MPH (ASCE-7)
EXPOSURE CATEGORY -

SEISMIC DESIGN CATEGORY A B C D
PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:
OCCUPANCY CATEGORY (TABLE 1604.5) I II III IV
SPECTRAL RESPONSE ACCELERATION S_s - %g S₁ - %g
SITE CLASSIFICATION (ASCE 7): A B C D E F
DATA SOURCE: FIELD TEST PRESUMPTIVE HISTORICAL DATA
BASIC STRUCTURAL SYSTEM (CHECK ONE)
 BEARING WALL DUAL W/SPECIAL MOMENT FRAME
 BUILDING FRAME DUAL W/INTERMEDIATE R/C OR SPECIAL STEEL
 MOMENT FRAME INVERTED PENDULUM

ANALYSIS PROCEDURE SIMPLIFIED EQUIVALENT LATERAL FORCE DYNAMIC
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? YES NO

LATERAL DESIGN CONTROL: EARTHQUAKE WIND
SOIL BEARING CAPACITIES:
FIELD TEST (PROVIDE COPY OF TEST REPORT) - PSF
PRESUMPTIVE BEARING CAPACITY - PSF
PILE SIZE, TYPE, AND CAPACITY -

ENERGY REQUIREMENTS:
THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST FOR THE STANDARD REFERENCE DESIGN VS THE ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.
EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: NO YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)
EXEMPT BUILDING NO YES PROVIDE CODE OR STATUTORY REFERENCE: _____
CLIMATE ZONE: 3A 4A 5A
METHOD OF COMPLIANCE: ENERGY CODE PERFORMANCE PRESCRIPTIVE
ASHRAE 90.1 PERFORMANCE PRESCRIPTIVE
OTHER: PERFORMANCE (SPECIFY SOURCE) _____

THERMAL ENVELOPE (PRESCRIPTIVE METHOD ONLY)
ROOF/CEILING ASSEMBLY (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY: R-19 + R-11 LS WITH R-3 THERMAL BLOCKS
U-VALUE OF TOTAL ASSEMBLY: N/A
R-VALUE OF INSULATION: N/A
SKYLIGHTS IN EACH ASSEMBLY: N/A
U-VALUE OF SKYLIGHT: N/A
TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN EACH ASSEMBLY: N/A

EXTERIOR WALLS (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY: R-0+R-15.8 CT. WITH BRICK VENEER
U-VALUE OF TOTAL ASSEMBLY: _____
R-VALUE OF INSULATION: N/A
OPENINGS (WINDOWS OR DOORS WITH GLAZING): DOUBLE PANE, H.M. FRAME
U-VALUE OF ASSEMBLY: 0.45 SOLAR HEAT GAIN COEFFICIENT: N/A
PROJECTION FACTOR: N/A DOOR R-VALUES: 1.3

WALLS BELOW GRADE (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY: N/A
U-VALUE OF TOTAL ASSEMBLY: N/A R-VALUE OF INSULATION: N/A

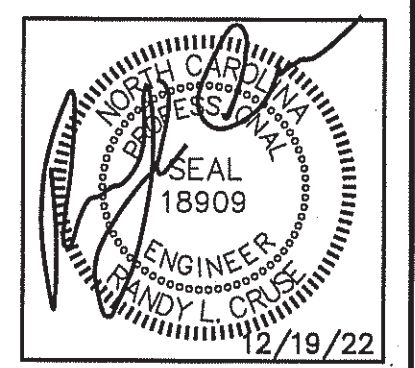
FLOORS OVER UNCONDITIONED SPACE (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY: N/A
U-VALUE OF TOTAL ASSEMBLY: N/A R-VALUE OF INSULATION: N/A

FLOOR SLAB ON GRADE
DESCRIPTION OF ASSEMBLY: SLAB-ON-GRADE
R-VALUE OF INSULATION: R-15 TO BOTTOM OF FOOTING
U-VALUE OF TOTAL ASSEMBLY: _____
HORIZONTAL / VERTICAL REQUIREMENT: _____
SLAB HEATED? YES NO

Summary:
ENERGY CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE
BUILDING CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: BUILDING CODE
MECHANICAL CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: MECHANICAL CODE
PLUMBING CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: PLUMBING CODE
ELECTRICAL CODE: 2020 NATIONAL ELECTRIC CODE
ACCESSIBILITY CODE: ICC/ANSI 117.1-2009 AMERICAN NATIONAL STANDARD ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
CONSTRUCTION: II-B
OCCUPANCY: BUSINESS

SHEET INDEX

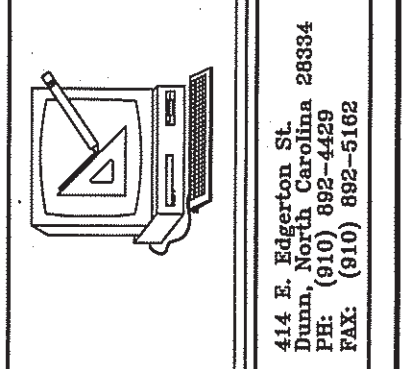
BD-1 OF 1	APPENDIX B
F-1 OF 2	FLOOR PLAN
F-2 OF 2	FOUNDATION PLAN
P-1 OF 3	PLUMBING SUPPLY PLAN
P-2 OF 3	PLUMBING WASTE & VENT PIPING PLAN
P-3 OF 3	PLUMBING WASTE & VENT RISER DIAGRAMS/NOTES
M-1 OF 2	MECHANICAL HVAC PLAN
M-2 OF 2	MECHANICAL SCHEDULES & DETAILS
E-1 OF 4	ELECTRICAL LIGHTING PLAN
E-2 OF 4	ELECTRICAL POWER PLAN
E-3 OF 4	ELECTRICAL PANEL SCHEDULES & NOTES
E-4 OF 4	ELECTRICAL RISER DIAGRAM



UP-FIT PLANS FOR:
T&L COATS
BUILDING #2
COATS, NORTH CAROLINA

REVISIONS

NO.	



Cruse and Associates, P.A.
414 E. Blount St., Raleigh, NC 27604
PH: (910) 892-4429
FAX: (910) 892-5182
LICENSE NO.: C-1721

THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE AND AS SUCH THESE DRAWINGS, DESIGNS, AND DESIGN CONCEPTS PRESENTED REMAIN THE PROPERTY OF THE ENGINEER. PUBLISHED OR DUPLICATED DRAWINGS OR DESIGNS ONLY WITH THE WRITTEN PERMISSION OF THE ENGINEER.
© COPY RIGHT

DATE 12-19-22
DRAWN BY BAM
JOB NO. 22-60

SHEET NO.
BD-1 OF 1