

# 2018 NEW CASTLE COUNTY COMMERCIAL FINAL CHECKLIST

(2018 IBC)(2015 IMC)(2015 IPC)(2015 IFGC)(NCC Chapter 6)(2009 ANSI 117.1)

Rev 1/23/19

	<u>Pass</u>	<u>Corr</u>	<u>N/A</u>		
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b><u>GENERAL</u></b>	
				<input type="checkbox"/> Permit displayed at worksite	Ch 6 6.03.012(Q)
				<input type="checkbox"/> Access provided to all areas to be inspected	Ch 6 6.03.018(A)
				<input type="checkbox"/> NCC approved, stamped building and L & G plans available at site	Ch 6 6.03.013
				<input type="checkbox"/> NCC Approved stamped building plans available at inspection site	Ch 6 6.03.013 (B3a)
				<input type="checkbox"/> Info on drawings shall clearly indicate the extent of the work	Ch 6 6.03.013(B)
				<input type="checkbox"/> All revisions to approved drawings have been submitted to & approved by NCC	Ch 6 6.03.013(B4)
				<input type="checkbox"/> All required approvals have been obtained:	Ch 6 6.03.019(H)
				• Fire Marshal	
				• State Boiler	
				• Special Inspections	
				• DelDOT	
				• Record Plan	
				• HVAC Balancing	
				• Septic/Well	
				• Final Electric	
				<input type="checkbox"/> If this is a fit-out: shell must have a C of O issued, or a Temp C of O	Ch 6 6.03.019(A,D)
				<input type="checkbox"/> Self-cert inspections (DWV, U/G, S/W) received & approved or witnessed	IPC 312, Ch 6 6.03.017
				<input type="checkbox"/> Contractor Verification Form properly completed	Ch 6 6.03.002
				<input type="checkbox"/> Temp C of O request requires approval from FM, FE, DelDOT, Special Services, DNREC, etc. prior to consideration from NCC. No life/safety issues shall be present	Ch 6 6.03.019 (A), Ch 6 6.03.018(G)
				<input type="checkbox"/> <b>Occupancy sign posted</b> (if assembly occupancy)	IBC 1004.9
				<input type="checkbox"/> Ceiling tiles: per plan, flame spread requirements per ASTM C 635	IBC 808
				<input type="checkbox"/> All equipment and materials installed in accordance with the manufacturer's installation instructions	
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b><u>E&amp;S CONTROLS (IF STILL REQUIRED TO BE IN PLACE DUE TO SITE CONDITIONS)</u></b>	
				<input type="checkbox"/> Silt fence per approved plan & functioning	E&S Handbook 3.1.2-1, Ch 6 6.03.013
				<input type="checkbox"/> Construction entrance installed & functioning	E&S Handbook 3.4.7-1, Ch 6 6.03.013
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b><u>BUILDING</u></b>	
				<input type="checkbox"/> Verify building use group, verify construction type	IBC Ch 3, 4, 6
				<input type="checkbox"/> Verify square footage matches approved record plan	Ch 6 6.03.013(B1a1)
				<input type="checkbox"/> Public walk completed, incl. ramps and railings	Ch 6 6.03.013(B1)
				<input type="checkbox"/> Protection of gas piping where exposed and could be damaged	IFGC 404.7
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b><u>WALL CONSTRUCTION</u></b>	
				<input type="checkbox"/> Fire wall	
				• Detail on plan, constructed without openings	IBC 706
				<input type="checkbox"/> Fire barrier	
				• Detail on plan, fire dampers, fire rated doors and frames, must be listed and labeled	IBC 707, 716, (T) 716.1(2)
				<input type="checkbox"/> Fire partitions	
				• Complete; properly located	IBC 708
				<input type="checkbox"/> Smoke partitions	
				• Complete; properly located	IBC 710
				<input type="checkbox"/> Fire stopping/Draft stopping: attics, concealed spaces, architectural trim, floor/ceiling assemblies (in combustible construction)	IBC 718

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5.    **EGRESS ELEMENTS**

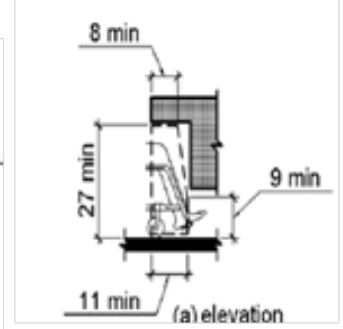
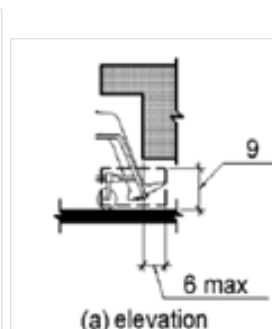
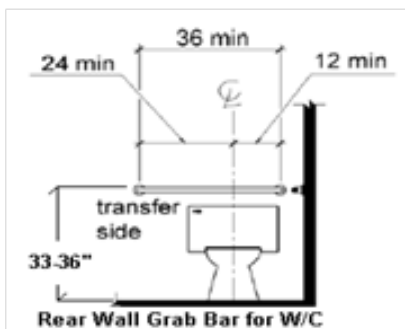
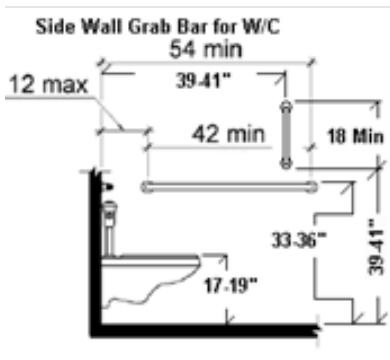
- Exit signs: illuminated and visible from all directions in the exit access route, and no more than 100' max from nearest visible sign IBC 1013
- Corridor/Aisle: width, travel distance, exit signage, accessibility IBC 1013, 1017, 1020, 1104, 1111, 2009 ANSI 117.1
- Safety glass: as per code & approved plan: must be permanently marked on glass IBC 2406
- Panic hardware/locks (thumb turn inside): per code, per plan IBC 1010.1.10
- Stairways maintain fire rating, exit signage adjacent to door IBC 707.3.3, 1011
- Handrails, stairs, treads, risers IBC 1009.3, 1011, 2009 ANSI 117.1
  - Shall meet graspable requirements, rail extends 12" beyond risers, anti-slip required on egress stair

6.    **FIRE EXTINGUISHER/ALARM**

- Smoke detector/alarm equipment installed per plan IBC 907
- Fire extinguishers located per plan and code Ch 6 6.03.013(B1), IBC 906

7.    **PLUMBING**

- Location and number of fixtures per NCC approved plan: baths, water fountains, mop sink Ch 6 6.03.013(B1)
- All valves accessible IPC 606.3
- Minimum floor drain size = 3" IPC 412.3, 412.3
- Fuel-fired appliances are prohibited in toilet room, storage room, bedrooms, closets, surgical rooms IMC 303.3
- Water heater shall be installed in accordance with code and its manufacturer installation instructions
  - Adequate combustion air IMC Ch 7
  - Pan required if installed where leak will cause damage IPC 504.7
  - Prohibited in toilet rooms, storage rooms, if fuel-fired IMC 303.3
  - Proper venting mfr specs, IMC 801
  - Blow-off pipe location IPC 504.6, 502.5
  - Gas pipe has shut-off valve, drip leg, approved connectors IFGC 409, 408
- Bathrooms IPC 424, 420, IBC 1109, 2009 ANSI 117.1, Ch 6 6.03.013(B1)
  - Handicapped signage with braille
  - Open face toilet seat is required
  - 5' turnaround for wheelchair accessible compartments is required
  - Trap protection required for exposed plumbing below sinks
  - Door shall swing out
  - Seat height 17" to 19", centerline 16" to 18"
  - Hot water activated from left side of fixture
  - Mirrors installed so the bottom is not more than 40" above the finished floor
  - Grab bars installed (33" to 36" AFF, 42" side wall, 24" rear wall, 18" vertical bar must be included)



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8.    **KITCHEN - INDIRECT WASTE** DE Title 16 sec 4.4, IPC Ch 8
- All equipment and plumbing fixtures used for storage, preparation, and handling of food including food storage area floor drains without backwater valves, drain through an air gap
  - Air gap (2x the supply diameter above the flood rim) or backflow preventer is installed on all fixtures and equipment which connect to or are supplied by the building water supply
  - Food storage area floor drains with backwater valves, dishwashing machines, food utensil sinks, and non-potable clear water waste discharges can be by air gap or air break
  - Fixtures **not** required to be indirectly connected are directly connected to the plumbing system (utensil/pot/pan washing, rinsing, and sanitizing sinks may be drained directly **or** indirectly)
  - Indirect waste shall **NOT** be installed in toilet rooms, closets, store rooms, or any unvented space
9.    **KITCHEN – GREASE TRAP** IPC 1003
- Grease trap min size 1000 gallons or size and model per Special Services approval
  - Food waste grinders have solids interceptors installed prior to reaching a grease trap
  - Access for service and maintenance of all interceptors and separators
10.    **HVAC INSPECTION**
- Fire dampers installed per code and approved plan Ch 6 6.03.013(B1), IMC 607
  - Smoke dampers, detectors in ductwork installed per code and approved plan Ch 6 6.03.013(B1), IMC 607
  - Machine room permanent signage marking: hot/cold water, fire, equipment potable/non-potable water, direction of flow IPC 608.8
  - Clearance to combustibles mfr specs, IMC 308
  - Smoke dampers, detectors in ductwork installed per code and approved plan Ch 6 6.03.013(B1), IMC 607
  - Roof top inspection
    - All equipment listed and labeled IMC 301.9
    - Bracing of equipment requires engineer's report Ch 6 6.03.018 (I)
    - Guards in place (within 10' of roof edge, 42" high) IMC 304.11
    - Insulation of ductwork IMC 604
    - Gas lines supported & painted: no untreated wood or corrosive materials used IMC 305
    - Condensate disposal mfr specs, IMC 307.2.1, IPC 314
    - EXHAUST DUCTS: (pertains to fan discharge)
      - Verify height: min 40" above roof surface IMC 506.3.13.3
      - Clearances: min 10' from plumbing vents or air intake vents or must be 3' above those inlets, also 10' from property line, and 10' above grade, and 2' above parapet walls IMC 804.3, 506.3.12, IPC 904.5
  - Balancing report complete & includes hood & make-up air totals IMC 508.1.2, IECC C408.2.2.1
11.    **KITCHEN – HOOD REQUIREMENTS – TYPE 1** IMC 506, 507, 508
- Each hood uses a separate duct system unless duct does not penetrate fire-rated assemblies all sharing hoods are on the same floor and in the same or adjoining rooms, and none serves a solid fuel appliance
  - Verify all type I hoods have passed P-37 Light Test Inspection
  - Verify Fire Marshal approval for **all** type I hood fire suppression systems
  - Horizontal sections slope toward hood at least 1:48 (1:12 when total length is 75' or more)
  - Cleanouts provided where duct is not accessible from either end
    - Cleanout doors are listed and labeled for this use
    - Doors at least 1 ½" from bottom, 1" from top or install on top with at least 1" clearance to edges

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- Minimum opening size is 12" square – or as large as possible if duct is too small
  - Horizontal ducts have cleanouts not more than 20 feet apart
  - In-line fans have cleanouts both upstream and downstream
- Type I hood exhaust fans activate automatically when cooking operations occur
- All Type I hoods have at least 18" clearance to combustibles
- Clearance is not required from gypsum or cement backers attached to non-combustibles & separated by a noncombustible material extending at least 18" beyond the edge of the hood
- Grease ducts clearance to non-combustibles at least 3" or listed covering
- Type I hoods are equipped with listed grease filters at least 2 ft above flame and burners, and 3 ½ ft above exposed charcoal or charbroil type cooking surfaces
- Filters are angled at least 45 degrees and the lower end has a drip tray
- Grease gutters are required and drain to an approved receptacle
- Canopy hoods extend at least 6" beyond the ends of the appliances served at front and sides
- Grease duct penetrating a floor or wall is enclosed in a system which matches the fire rating of the most restrictive assembly penetrated but not more than 2 hour rating. One of the following types:
- A shaft enclosure meeting the requirements of IBC 708 (prescriptive clearances)
  - Field applied duct enclosure (i.e. labeled "grease duct fire wrap" - may have reduced clearances)
  - Factory Built grease duct assemblies (check manufacturer's clearances)
  - Required cleanouts have access panels on the outside of shaft walls which match the fire-rating of the shaft and are labeled 'ACCESS PANEL. DO NOT OBSTRUCT'

12.    **KITCHEN - HOOD REQUIREMENTS - TYPE 2** IMC 506.4

- Type II hood duct is independent of all other exhaust systems
- Type II hood duct is rigid metal duct and all seams must be sealed

13.    **KITCHEN – MAKEUP AIR** IMC 508

- Makeup air approximately equal to the hood exhaust volume is present & automatic with hood operation
- Makeup air temperature is not more than 10° different from conditioned space unless the additional

14.    **APPLIANCES** IMC Ch 3, Ch 9

- Gas Fired Moveable Appliances are connected to the gas supply by an approved flexible connector and protected
- Flexible connector maximum length is 6 feet
- Shut off valve is installed ahead of the connector
- Flexible connectors are protected from damage
- Fuel burning appliances are provided with doors and have unobstructed passageways at least 36" wide and 80" high
- Portable fire extinguishers is located within 30' of commercial kitchen equipment
- heating and cooling loads are designed into the kitchen HVAC system

Inspector: \_\_\_\_\_ Permit Number: \_\_\_\_\_

Date: \_\_\_\_\_ Inspection Results: Pass  Partial  Corrections Required