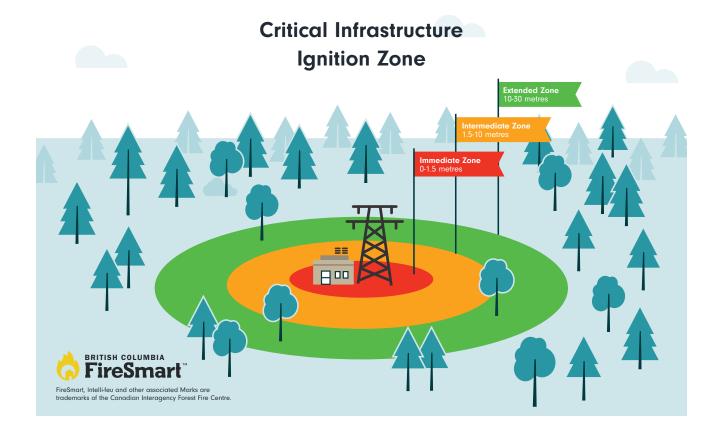
FIRESMART® CRITICAL INFRASTRUCTURE ASSESSMENT





Facility Name			Date	
Operator			Email	
Geographic Location			Lat/Long	
Assessor			Email	
Photos? (Y/N)		Photo #'s:		
Comments:				





A.	CRITICAL BUILDING			SCORE
1	What type of roofing material and construction does the	Class A UL/ASTM fire rated roof covering (e.g. Metal, rated hot lay, clay tile or asphalt shingles)	0	
1	building have?	Unrated roof covering (including wood shakes and wood shingle roofs)	30	
2	Does the roof covering have any gaps or openings, exposing combustible building components, or enclosed	No gaps, openings that expose combustible building components or enclosed spaces where embers could accumulate, lodge or penetrate	0	
-	spaces where embers could accumulate, lodge or penetrate?	Gaps, openings that expose combustible building components or enclosed spaces where embers could accumulate, lodge or penetrate	30	
3	Are the gutters combustible or non- combustible?	Non- combustible gutters, and no exposed combustible fascia/roof covering above gutters (metal or aluminum) or no gutters	0	
		Combustible (plastic, vinyl, wood) and/or exposed combustible fascia/roof covering above gutter	6	
			6	
4	How clean is the roof and gutters?	No needles, leaves or other combustible material	0	
-		Needles, leaves or other combustible material present	10	
5	Are eaves closed and are eaves/roofs free of any gaps, holes, or areas where embers	Closed or no eaves/no gaps or holes/no unprotected areas to attic /interior of building, vents with 3 mm (1/8") non- combustible screening, operational louvres and flaps/ASTM ember resistant rated vents.	0	
5	could accumulate, lodge or penetrate? Are all vents and openings protected?	Open eaves/roof gaps or unprotected openings to attic/interior of building, vents not 3 mm (1/8") non- combustible screened or ember resistant rated; louvres/ flaps not operational with accumulated combustible debris	30	
6	Are all HVAC/active	HVAC/active ventilation system with 24 hr onsite operator, or remote shut-down capability	0	
	ventilation systems capable of being shut down?	HVAC with no caretaker or remote shut-down capability/cannot shut-down	30	





	What type of exterior siding does the building have?	Ignition resistant (cement fibre board, log) or non- combustible (stucco, metals, concrete, brick/stone)	0	
7		Combustible siding or non-ignition resistant siding (vinyl, wood, acrylic stucco); treatment to Immediate Zone and Intermediate Zone	6	
		Combustible siding or non-ignition resistant siding (vinyl, wood, acrylic stucco); no treatment to Immediate Zone and Intermediate Zone	30	
8	Is exterior siding free of gaps, holes, or other areas where	No gaps or cracks, missing siding or holes	0	
	embers could accumulate, lodge, or penetrate?	Gaps, cracks or holes	10	
	Are walls protected with a minimum 15 centimetres (6	No less than 15 centimetre non-combustible vertical ground-to-siding surface	0	
9	inches) of non-combustible ground- to-siding clearance?	Less than 15 centimetres non-combustible vertical ground-to-siding surface	30	
10	How fire resistant are the windows or doors (including large doors/garage doors)?	Tempered glass in all doors and windows and treated Immediate Zone and Intermediate Zone; no gaps in ANY doors OR no windows	0	
		Multi pane glass small/medium and treated Immediate Zone and Intermediate Zone; no gaps in ANY doors	1	
		Multi pane glass large and treated Immediate Zone and Intermediate Zone; no gaps in ANY doors	2	
		Single pane glass- small/medium and treated Immediate Zone, Intermediate Zone and Extended Zone; no gaps in ANY doors	4	
		Single panel glass large and treated Immediate Zone, Intermediate Zone and Extended Zone	6	
		Tempered glass in all doors and windows and no treatment to Immediate Zone; combustible doors; no gaps in ANY doors	20	
		Multi pane glass – any size and no treatment to Immediate Zone and/or Intermediate Zone OR Single pane glass – any size and no treatment to Immediate Zone and/or Intermediate Zone and/or Extended Zone; gaps in ANY door	30	





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		HIGH >30		
		MODERATE 21-29		
		LOW < 21		
CRITICAL BUILDING SCORE				
		Building is located on the mid to upper portion or crest of a hill with no set back	30	
		Building is located on the mid to upper portion or crest of a hill and set back AND treated Immediate Zone, Intermediate Zone, and Extended Zone	10	
		Building is located on the bottom; AND treated Immediate Zone, Intermediate Zone, Extended Zone	3	
12	Is the building set back from the edge of a slope?	Building is located on flat ground that extends to the full distance of Extended Zone	0	
		Not sheathed in with fire resistant/non-combustible material or siding, and/or unprotected gaps or cracks present, and/or non-fire-rated construction with combustible surface and/or combustible debris under deck; OR any extension construction of any combustible material and no treatment no treatment to Immediate Zone and/or Intermediate Zone and/or Extended Zone.	30	
11	Is the underside of the balcony, deck, porch, other building extensions or open foundation completely sheathed- in or open and free of combustible materials?	N/A, sheathed in with fire resistant/non-combustible materials, or non-combustible siding, no gaps or cracks, OR open heavy timber, non-combustible or fire-rated construction OR AND non-combustible surface and no combustible debris under deck/extension AND treated Immediate Zone, Intermediate Zone and Extended Zone and slope set-back (if applicable)	0	





В.	B. CRITICAL STRUCTURES - Utility Poles, Communications Towers, Bridges, Pipeline Valve Stations					
1	Valve station/substation/	N/A or a non-combustible surface is continuous under all combustible infrastructure	0			
1	Propane Tanks	There is combustible surface under ANY combustible infrastructure	30			
2	Utility line poles or critical component (weather stations, antennae masts, cellular	N/A or Poles/ support structures are constructed of non- combustible material (metal or concrete)	0			
	towers) support structure/mast construction material?	Poles/ support structures are constructed of wood	6			
3	Utility line poles or critical component (weather stations, antennae masts, cellular towers) support structure condition?	N/A, Non-combustible or combustible poles or support structures are free of petroleum/ accelerant-based coatings, cracks and gaps where embers may accumulate, lodge or penetrate and non-combustible surface is continuous under all combustible infrastructure	0			
		Combustible poles or support structures have cracks and gaps where embers may accumulate, lodge or penetrate AND/OR there is combustible surface under ANY combustible infrastructure	30			
4	Critical component susceptibility to radiant heat	N/A or Critical components are not constructed of materials that are susceptible to damage from significant radiant or convective heat fluxes OR Critical components are constructed of materials that are susceptible to damage from significant radiant or convective heat fluxes and Immediate Zone and/or Intermediate Zone and/or Extended Zone are treated.	0			
		Critical components are constructed of materials that are susceptible to damage from significant radiant or convective heat fluxes and no treatment to Immediate Zone and/or Intermediate Zone and/or Extended Zone.	30			





5	Critical components susceptibility to embers - free of any gaps, holes, or areas where embers	N/A or Critical components are not constructed of materials that are susceptible to damage from embers or OR Critical components are constructed of materials that are susceptible to damage from embers but are free any gaps, holes or areas where embers could accumulate, lodge, or penetrate.	0	
	could accumulate, lodge, or penetrate? Bridge construction material	Critical components are constructed of materials that are susceptible to damage from embers and have gaps, or areas where embers could accumulate, lodge or penetrate and damage components	30	
		N/A or Structure is constructed of non-combustible material (metal or concrete)	0	
6		Structure is constructed of heavy timber wood or logs and Immediate Zone and/or Intermediate Zone are treated	6	
		Structure is constructed of wood or logs and no treatment of Immediate Zone and/or Intermediate Zone	30	
	Pridge condition	N/A or Combustible structure is free of cracks and gaps where embers may lodge	0	
7	Bridge condition	Combustible structure has cracks and gaps where embers may lodge	30	
	CRITICAL STRUCTURE SC	DRE		
		LOW < 21		
		MODERATE 21-29		
		HIGH >30		





C.	C. IMMEDIATE ZONE (0-1.5 METRES)				
	1.5 metres from furthest extent of building or critical structure (includes overhangs, extensions and decks)	Non-combustible surface, no combustible debris, materials, fences or plants present	0		
1		Combustible surface, combustible debris, fences or plants present	30		
	IMMEDIATE ZONE SCORE				
		LOW < 21			
		MODERATE 21-29			
		HIGH >30			





D.	INTERMEDIATE ZONE (1.5-	10 METRES OR 5-30 FEET)		SCORE
1	Where are flammable substances, or other combustible materials stored? (Vehicles, flammable liquids/ gases construction materials, debris etc.)	N/A or More than 10 metres from the structure, or in an approved and ember resistant storage container	0	
1		Less than 10 metres from the structure and not in an approved and ember resistant storage	30	
	Where are the unmitigated non-critical outbuildings located? (buildings that are not-mitigated to	N/A or More than 15 metres (50 feet) from primary structure	0	
2	the same standards as the primary building or critical structure)	Less than 15 metres from primary structure	30	
	What type of forest grows within 10 metres of the building, outbuilding or critical structures? What kind of surface vegetation and combustible materials are within 10 metres of the building, outbuildings or critical structures?	No trees or Healthy deciduous (i.e. poplar, aspen, birch)	0	
3		Mixedwood (both conifer and deciduous)	30	
		Conifer (i.e. spruce, pine, fir, cedar)	30	
		No vegetation; Well maintained lawn (15 centimetres; 6 inches or shorter); low flammability; low growing discontinuous plants with treated Immediate Zone (0-1.5 metres)	0	
4		Unmaintained grass (greater than 15 centimetres in length); flammable plants; continuous plants or tall growing plants; untreated Immediate Zone	30	
		Twigs, branches, logs and accumulations of tree needles or leaves and other combustible materials	30	
	INTERMEDIATE ZONE SC	ORE		
		LOW < 21		
MODERATE 21-29				
		HIGH >30		





E.	EXTENDED ZONE (10- 30 M	IETRES OR 30-100 FEET)		SCORE
		No trees or Healthy deciduous (i.e. poplar, aspen, birch)	0	
	What type of forest grows within 10-30 metres of the	Mixedwood (both conifer and deciduous)	10	
1	building, outbuilding or critical	Conifer (i.e. spruce, pine, fir, cedar)		
	structures?	Separated	10	
		Continuous	30	
	What kind of surface vegetation and combustible	None within 10 - 30 metres)	0	
2	materials are within 10- 30 metres of the building, outbuildings or critical structures?	Scattered within 10 - 30 metres	5	
2		Unmaintained grass (greater than 15 cm)	5	
		Abundant within 10 - 30 metres	10	
-	Are there low tree branches	None within 10 - 30 metres	0	
3	within 2 metres of the ground?	Present within 10 - 30 metres	10	
	EXTENDED ZONE SCORE			
		LOW < 21		
		MODERATE 21-29		
		HIGH >30		

CRITICAL INFRASTRUCTURE HAZARD SCORE	SCORE
Building	
Critical Structures	
Immediate Zone	
Intermediate Zone	
Extended Zone	
TOTAL	

LOW <21	MODERATE 21-29	HIGH > 30

The goal is to drop the hazard rating as low as possible by changing each factor to a condition that results in a low score.

