

Appendix 5.3 NFPA Rating Method Detail.

<b>STRUCTURE</b>					
<b>NFPA 1140 Criteria</b>	<b>Points</b>	<b>Relative Weight</b>	<b>CFPA Variable</b>	<b>Points</b>	<b>Relative Weight</b>
<b>Roofing Assembly</b>			<b>Roof Type</b>		
Class A roofing	0		0 = Not Ascertained	AVG*	
Class B roofing	3		3 = Metal Tile	0	
Class C roofing	15		1 = Composition	15	
Non-rated roof	25	17%	2 = Wood Shake	35	20%
<b>Building Materials</b>					
Fire-resistant siding, eaves and deck	0				
Fire-resistant siding, eaves and combustible deck	5				
Combustible siding and deck	10	7%			
<b>Topography within 300 ft. of Structure</b>			<b>Slope</b>		
Slope < 9%	1		0 = < 20 %	0	
Slope 10% - 20 %	4		1 = 20 – 30%	5	
Slope 21% - 30%	7		2 = 30 – 40%	10	
Slope 31% - 40%	8		3 = > 40%	15	9%
Slope > 41%	10	7%			
<b>Building setback relative to slopes of 30% or more</b>			<b>Southerly Aspect</b>		
> 30 ft. to slope	1		0 = No	0	
< 30 ft. to slope	5	3%	1 = Yes	5	3%
<b>Placement of Gas and Electric Utilities</b>			<b>Power Transmission Lines</b>		
Both underground	0		0 = Not Present	0	
one underground, one aboveground	3		1 = Present	5	3%
Both aboveground	5	3%			
<b>Total Possible</b>	<b>55</b>	<b>38%</b>		<b>60</b>	<b>35%</b>

<b>FUELS</b>					
<b>NFPA 1140 Criteria</b>	<b>Points</b>	<b>Relative Weight</b>	<b>CFPA Variable</b>	<b>Points</b>	<b>Relative Weight</b>
<b>Defensible Space</b>			<b>Defensible Space Distance</b>		
>100 ft.	1		0 = Not Ascertained	AVG*	
71-100 ft.	3		5 = > 40 ft.	0	
30-70 ft.	10		4 = 30 – 40 ft.	15	
< 30 ft.	25	17%	3 = 20 – 30 ft.	20	
			2 = 10 – 20 ft.	25	
			1 = 0 -10 ft.	35	20%
<b>Vegetation (Fuel Models)</b>			<b>Vegetation Near Propane Tank</b>		
Light (e.g. grasses, forbs, sawgrasses, and tundra)	5		0 = Not Ascertained	AVG*	
Medium (e.g. ligh brush and small trees)	10		5 = No Propane Tank	0	
Heavy (e.g. dense brush, timber, and hardwoods)	20		4 = > 30 ft.	1.0	
Slash (e.g. timber harvesting residue)	25	17%	3 = 20 – 30 ft.	2	
			2 = 10 – 20 ft.	3	
			1 = < 10 ft.	5	3%
			<b>Vegetation Near Woodpile</b>		
			0 = Not Ascertained	AVG*	
			5 = No Woodpile	0	
			4 = > 30 ft.	1	
			3 = 20 – 30 ft.	3	
			2 = 10 – 20 ft.	4	
			1 = < 10 ft.	5	3%
			<b>Propane Present</b>		
			0 = No	0	
			1 = Yes	3	2%
			<b>Unpruned Lower Limbs Within 30 ft. of Structure</b>		
			0 = None	0	
			1 = Light to Moderate	3	
			2 = Heavy	5	3%
			<b>Vegetation Overhanging Structure</b>		
			0 = No	0	
			1 = Yes	5	3%
<b>Total Possible</b>	<b>50</b>	<b>35%</b>		<b>58</b>	<b>34%</b>

## FIRE PROTECTION CAPACITY

NFPA 1140 Criteria	Points	Relative Weight	CFPA Variable	Points	Relative Weight
<b>Ingress/Egress</b>			<b>Egress</b>		
Two or more roads in/out	0		0 = Yes	0	
One road in/out	7	5%	1 = Yes, With Difficulty	4	
			2 = No	8	5%
<b>Road Width</b>			<b>Driveway Width</b>		
> 24 ft.	0		0 = Not Ascertained	AVG*	
24-20 ft.	2		3 = > 15 ft.	0	
< 20 ft.	4	3%	2 = 10 - 15 ft.	3	
			1 = 0 -10 ft.	5	3%
<b>All-season Road Condition</b>			<b>Surface/Grade</b>		
Surfaced, grade < 5%	0		Asphalt or Concrete, < 5%	0	
Surfaced, grade > 5%	2		Asphalt or Concrete, > 5%	2	
Non-surfaced, grade < 5%	2		Gravel, < 5%	4	
Non-surfaced, grade > 5%	5		Gravel, > 5%	8	
Other than all season	7	5%	Grass/Soil	10	6%
<b>Fire Service Access</b>			<b>Length</b>		
< 300 ft. with turnaround	0		< 300 ft.	0	
> 300 ft. with turnaround	2		> 300 ft.	5	3%
< 300 ft. without turnaround	4		<b>Driveway Bridge Adequate</b>		
> 300 ft. without turnaround	5	3%	0 = Not Ascertained	AVG*	
			4 = Unsure	8	
			1 = No Bridge	0	
			2 = Yes	0	
			3 = No	8	5%
<b>Street signs</b>			<b>Address Sign Visible</b>		
Present - 4 inch and reflective	0		0 = Not Ascertained	AVG*	
Absent	5	3%	3 = Not Applicable	AVG*	
			1 = Yes	0	
			2 = No	8	5%
<b>Water Source Availability</b>			<b>Water Supply Type</b>		
Presurized Water Source availability			0 = Not Ascertained	AVG*	
500 gpm Hydrants < 1000 ft. apart	0		3 = Hydrant	0	
250 gpm Hydrants > 1000 ft. apart	1		1 = Tank	1	
Non Pressurized water source availability			2 = Pond	1	
> 250 gpm continuous for 2 hours	3		4 = No Water Supply	3	2%
< 250 gpm continuous for 2 hours	5		<b>Water Supply Capacity</b>		
Water Unavailable	10	7%	0 = Not Ascertained	AVG*	
			3 = > 1,500 Gallons	0	
			2 = 500 – 1,500 Gallons	1	
			1 = < 500 Gallons	2	
			4 = No Water Supply	3	2%
			<b>Water Supply Distance</b>		
			0 = Not Ascertained	AVG*	
			1 = < 100 ft.	0	
			2 = 100 – 500 ft.	1	
			3 = > 500 ft.	2	
			4 = No Water Supply	3	2%
<b>Total Possible</b>	<b>38</b>	<b>27%</b>		<b>53</b>	<b>31%</b>

<b>TOTALS</b>					
<b>NFPA 1140 Criteria</b>	<b>Points</b>	<b>Relative Weight</b>	<b>CFPA Variable</b>	<b>Points</b>	<b>Relative Weight</b>
<b>STRUCTURE</b>	55	38%	<b>STRUCTURE</b>	60	35%
<b>FUELS</b>	50	35%	<b>FUELS</b>	58	34%
<b>FIRE PROTECTION</b>	38	27%	<b>FIRE PROTECTION</b>	53	31%
Total Possible	143	100%	Total Possible	171	100%
<b>Other Factors</b>					
<b>Additional Rating Factors (rate all that apply)</b>					
Topographical features that adversely affect wildland fire behavior	0-5				
Areas with a history of higher fire occurrence than surrounding areas due to special situations (e.g. lightning, railroads...)	0-5				
Areas that are periodically exposed to unusually severe fire weather and strong dry winds	0-5				
Separation of adjacent structures that could contribute to fire spread	0-5				
<b>Organized Response Resources</b>					
Station < 5 mi. from structure	1				
Station > 5 mi. from structure	3				
<b>Fixed Fire Protection</b>					
NFPA 13,13R, 13D sprinkler system	0				
None	5				
<b>Total Possible</b>	<b>28</b>				
Grand Total Possible	171				
<b>NFPA Rating Model Break Points</b>			<b>CFPA Structural Vulnerability Break Points</b>		
Low Hazard	< 40		Low Hazard	< 40	
Moderate Hazard	40-69		Moderate Hazard	40-69	
High Hazard	70-112		High Hazard	70-112	
Extreme Hazard	> 112		Extreme Hazard	> 112	
<b>Total Possible</b>	<b>171</b>		<b>Total Possible</b>	<b>171</b>	