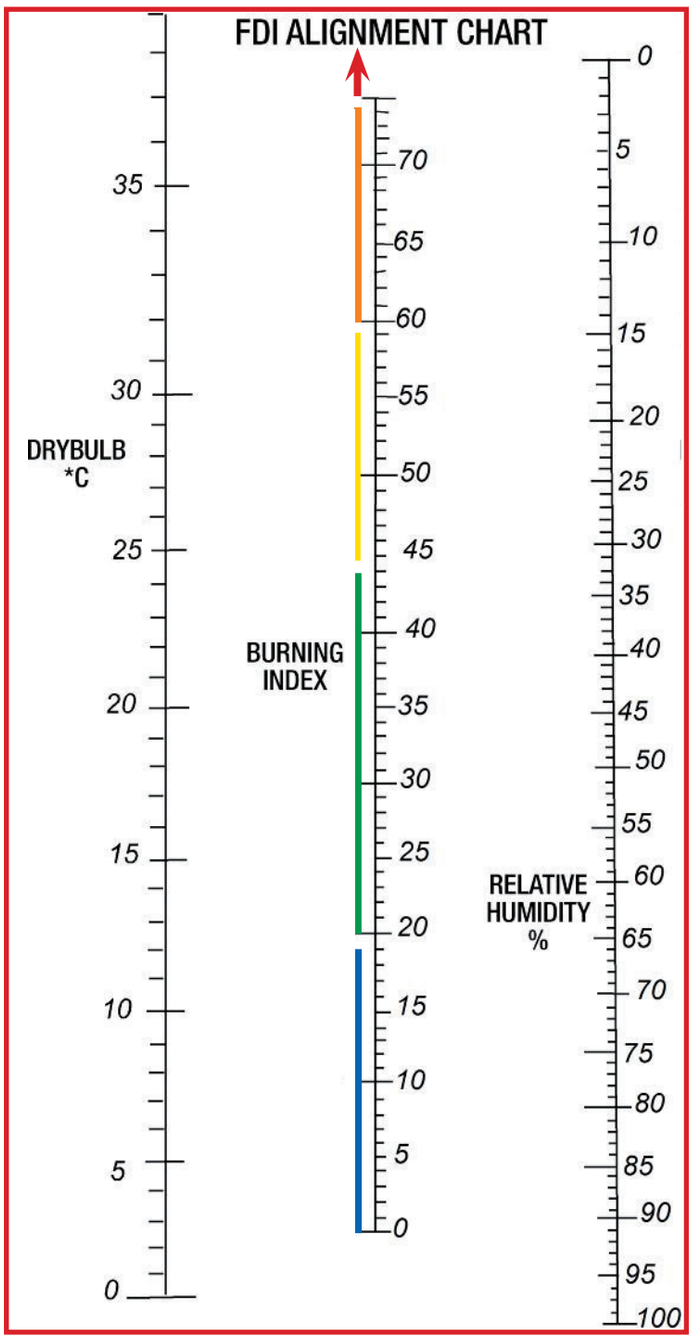
FDI RAINFALL CORRECTION FACTOR

RAINFALL	NUMBER OF DAYS SINCE LAST RAINFALL										
mm	1	2	3	4	5	6	7- 8	9 -10	11-12	13-15	16-20
0.1-2.6	0.7	0.9									
2.7-5.2	0.6	0.8	0.9								
5.3-7.6	0.5	0.7	0.9	0.9							
7.7-10.2	0.4	0.6	0.8	0.9	0.9						
10.312.8	0.4	0.6	0.7	0.8	0.9	0.9					
12.9-15.3	0.3	0.5	0.7	0.8	0.8	0.9	1.0				
15.4-20.5	0.2	0.5	0.6	0.7	0.8	0.8	0.9				
20.6-25.5	0.2	0.4	0.5	0.7	0.7	0.8	0.9	1.0			
25.6-38.4	0.1	0.3	0.4	0.6	0.6	0.7	0.8	0.9	1.9		
38.5-51.1	0.1	0.2	0.4	0.5	0.5	0.6	0.7	0.8	0.9		
51.2-63.8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.9	
63.9-76.5	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.9
76.6+	0.1	0.1	0.1	0.2	0.4	0.5	0.6	0.6	0.7	0.8	0.9

WIND FACTOR Add the correction factor to the BI to calculate the FDI

Wind Speed	Correction Factor	Wind Speed	Correction Factor	Wind Speed	Correction Factor	Wind Speed	Correction Factor
0	0	12	10	24	15	36	26
1	0	13	10	25	16	37	29
2	4	14	10	26	19	38	30
3	5	15	10	27	20	39	30
4	5	16	11	28	20	40	30
5	6	17	14	29	20	41	31
6	9	18	15	30	20	42	34
7	10	19	15	31	20	43	35
8	10	20	15	32	21	44	35
9	10	21	15	33	24	45	36
10	10	22	15	34	25	46	40
11	10	23	15	35	25	47	40



Manual Fire Danger Index (FDI) calculation procedure:
Repeat procedure at 10H00 and at 14H00 daily.
Rainfall only measured at 10H00 for 24 hour period.
Wind speed correction added to Burning Index (BI) for FDI.
Rainfall correction factor multiplied with FDI for final corrected FDI.
Ignore the rainfall correction factor if no rain fell.

Measure the outside temperature in °C.
Measure / calculate the % relative humidity.
Measure the wind speed in km/h.
Measure the rainfall in mm only at 10H00 (for 24 H period).
Note the wind direction (not used in FDI calculation).
Note the Barometric pressure in mb/hpa (not used in FDI calculation).

Take the manual FDI alignment chart.
Put the one end of a ruler on the measured value of outside temperature.
Put the other end of the ruler on the measured/calculated outside % relative humidity.
Read the BI off the chart from the middle column, reading above the ruler.
Add the wind correction factor (from the wind correction table) to the BI.
If you had no rain the answer to this calculation will be your FDI.

If you measured rainfall at 10H00 find the rainfall correction factor (from the rainfall correction table) and multiply the above calculated FDI with the rainfall correction factor to get the final FDI.
Apply the rainfall correction factor to both 10H00 and 14H00 FDI`s for the same day.
Apply the rainfall correction factor at 10H00 & 14H00 daily until the corrections on the table stops.
If you measure rain on successive days, and you get various rainfall correction factors for various days, keep multiplying the FDI with all the rainfall correction factors to get the FDI – the more successive rain, the more correction factors, the lower the FDI.
(X correction for 1st day rain, X correction 2nd day rain, X correction 3rd day rain, etc).
Lots of rain will have a longer FDI rainfall correction.
Little rain will only influence the FDI for a short period.

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FIREWISE

NATIONAL FIRE DANGER RATING SYSTEM CHART

INDICATIVE COLOUR	BLUE	GREEN	YELLOW	ORANGE	RED
DANGER RATING	Insignificant	Low	Moderate	High	Extreme
FIRE PREVENTION AND PREPAREDNESS MEASURES	No precaution is needed.	Fires including prescribed burns may be lit, used or maintained in the open air, on the condition that persons making fires take reasonable precautions against the fires spreading.	No fires may be allowed in the open air except those that are authorised by the Fire Protection Officer where a Fire Protection Association exists; or elsewhere by the Chief Fire Officer of the local fire service; or fires in designated fireplaces.	Subject to promulgation of Chapter 3 of the NVFFA of 1998 as amended; no fires may be allowed in the open air, except in designated fireplaces and for use for veld management purposes when due authority has been granted.	No fires may be allowed under any circumstances in the open air and Fire Protection Associations and municipal Disaster Management Centres must invoke contingency fire emergency and disaster management plans including extraordinary readiness and response plans. All operations likely to ignite fires halted. Householders placed on alert.
RELATIONSHIP WITH DISASTER MANAGEMENT				The threat of disastrous wildfires exists at municipal level under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Act of 2002).	The threat of disastrous wildfires at provincial level exists under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Act of 2002).
FIRE BEHAVIOUR	Fires are not likely to ignite. If they do, they are likely to go out without suppression action. There is little flaming combustion.	Fires likely to ignite readily but spread slowly. Flame lengths in grassland and plantation forest litter lower than 1.0 m and rates of forward spread less than 0.3 kilometres per hour.	Fires ignite readily and spread rapidly. Flame lengths between 1 and 2m, and rates of forward spread between 0.3 and 1.5 kilometres per hour.	Fires ignited readily and spread very rapidly, with local crowning and short-range spotting. Flame lengths between 2 and 5 m, and rates of forward spread between 1.5 and 2.0 kilometres per hour.	Extreme fire behaviour. Long range fire spotting is likely in these fuel types. Rates of forward spread of head fires can exceed 4.0 kilometres per hour and flame lengths will be in the order of 5 – 15 m or more.
FIRE SUPPRESSION DIFFICULTY	One or a few field crew with basic fire fighting tools easily suppresses any fire that may occur.	Direct attack feasible: fires safely approached on foot. Suppression is readily achieved by direct manual attack methods.	Direct attack constrained: Not safe to fight fire on foot for extended periods of time. Best forms of control should combine water tankers and adequate fire fighters.	Indirect attack feasible: Fires cannot easily be approached on foot. Strategic burning combined with aerial support are the recommended methods to combat fires. Equipment such as water tankers should concentrate efforts on containing the flanks and the head of the fire. Special precautions may be required to protect lives and property.	Any form of fire control is likely to be precluded until the weather changes. Back burning dangerous and best avoided. Attacking the fire from the back, along the flanks is possible, using a combination of all available resources.

FIREWISE

Enquiries: Director: Forestry Regulation, Private Bag X 313, Pretoria 0001

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