

Common Myth #9

Posted on [March 1, 2013](#) by [Amerex](#)

I can use two 20B rated extinguishers to meet a 40B requirement

Description

You can't if you are using dry chemical extinguishers but you can if you are using foam extinguishers. This is allowed in NFPA 10 Chapter 6 –

6.3.1 Other than for Fires in Flammable Liquids of Appreciable Depth.

6.3.1.3 Up to three AFFF or FFFP fire extinguishers of at least 2 ½ gal. (9.46L) capacity shall be permitted to be used to fulfill extra (high) hazard requirements.

6.3.1.4 Two AFFF or FFFP fire extinguishers of at least 1.6 gal (6L) capacity shall be permitted to be used to fulfill ordinary (moderate) hazard requirements.

6.3.1.5 Two or more fire extinguishers of lower rating shall not be used to fulfill the protection requirements of Table 6.3.1.1 except as permitted by 6.3.1.3 and 6.3.1.4

6.3.2 Flammable Liquids of Appreciable Depth

6.3.2.4 AFFF- or FFFP – type fire extinguishers shall be permitted to be provided on the basis of 1-B of protection per ft² (0.09m²) of flammable surface of the largest hazard area. (*For fires involving water-soluble flammable liquids, see 5.5.3*)

6.2.3.5 Two or more fire extinguishers of lower ratings, other than AFFF- or FFFP-type fire extinguishers, shall not be used in lieu of the fire extinguisher for the largest hazard area.

6.3.2.6 Up to three AFFF – or FFFP – type fire extinguishers shall be permitted to fulfill the requirements, provided the sum of the Class B ratings meets or exceeds the value required for the largest hazard area.

Dry chemical extinguishers have no “securement” capabilities. When using a dry chemical extinguisher on flammable liquids, the operator(s) will either put out all of the fire or none of it. It is impossible to put out half of the fire and go get another dry chemical extinguisher to put out the other half; the fire will reflash over the entire surface area.

Dry Chemical is also “application sensitive” meaning that it does not matter how much you apply to the fire, it won't go out if the dry chemical was not applied properly. We have seen one person put out a 60 square foot pit fire (much larger than what would be considered to be an “incipient” fire) three times with a single 20 lb. dry chemical extinguisher. We have also seen four people each with a 30 lb. dry chemical attack the same fire simultaneously and

fail to put it out (not once but three times!). If you don't use dry chemical properly on a flammable liquid fire, it won't matter how much you have; the fire won't go out.

Foam is "user friendly" meaning that as long as it is put on the fire in nearly any manner (in the case of hydrocarbons) some success will be accomplished. Foam does have some "securement" capabilities. Foam puts out a flammable liquid fire by securing the vapors coming off the fuel and separating them from the ignition source and surrounding air. This makes it possible to put out a portion of the fire and use a second foam extinguisher to extinguish the rest.

Make no mistake, as with any fire, if it is too large, or has been burning too long, it is no longer an incipient fire and therefore it should not be attempted to extinguish with a hand portable fire extinguisher.