

In the standard specification of bituminous mix design importance is given to attain maximum density high by selecting aggregate gradation and maximizing stability value. Pavement often fails due to the development of fatigue cracks on it which occurs when bituminous mixes fail to sustain repetitive loading .To prevent this failure the mix needs to be designed accordingly .In this work Bituminous Concrete (BC) has been designed considering fatigue life of mix as one parameter besides the Marshall parameters .The reliability with which a bituminous mix satisfies the specification of all the design parameters has been estimated as a part of this work. Studies have been made on mixes formed from some non-standard aggregate gradation. Finally a gradation is proposed which gives better fatigue performance maintaining rutting and serviceability requirements.