Radiological Medical Device Technologies		Lecture 11
	By	
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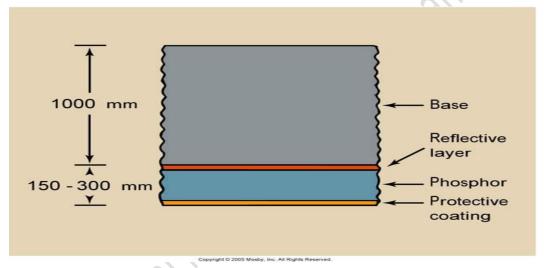
Intensifying screens & Cassette

Intensifying screens:

Usually the radiographic film is sandwiched between two screens.

In most screens there are four distinct layers:

- 1-Protective coating
- 2-Phosphor : To convert the energy of the x ray beam into visible light.
- 3-Reflective layer
- 4-Base: It acts as a mechanical support for the phosphor layer.



Fig(1) :layers of Intensifying screens

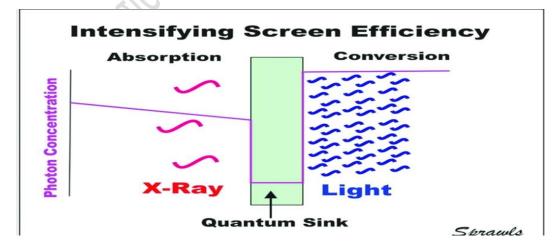


Fig (2): Working mechanism intensifying screens

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Cassette:

The cassette contains two important layers, front and back, as shown in the figure(3).

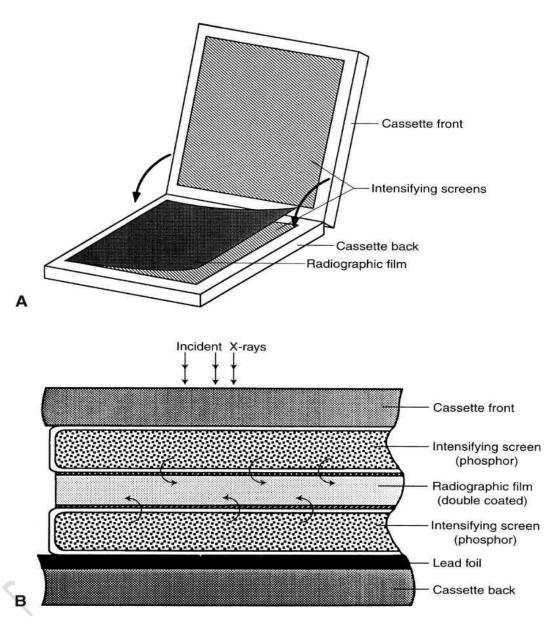


Fig (3): The combination of film, intensifying screen & cassette.

The front surface should be made of material with a low atomic number and the back surface is usually made of high atomic number to minimize backscatter.