

```
function [ img_new ] = Img_Reconstruct( img_comp )

img_hh_r0 = img_comp.red.hh;
img_hl_r0 = img_comp.red.hl;
img_lh_r0 = img_comp.red.lh;
img_ll_r0 = img_comp.red.ll;

img_hh_g0 = img_comp.green.hh;
img_hl_g0 = img_comp.green.hl;
img_lh_g0 = img_comp.green.lh;
img_ll_g0 = img_comp.green.ll;

img_hh_b0 = img_comp.blue.hh;
img_hl_b0 = img_comp.blue.hl;
img_lh_b0 = img_comp.blue.lh;
img_ll_b0 = img_comp.blue.ll;

img_r = Haar_Reconstruct( img_hh_r0, img_hl_r0, img_lh_r0, img_ll_r0
);
img_g = Haar_Reconstruct( img_hh_g0, img_hl_g0, img_lh_g0, img_ll_g0
);
img_b = Haar_Reconstruct( img_hh_b0, img_hl_b0, img_lh_b0, img_ll_b0
);

[w,h] = size( img_r );
img_new = zeros( w, h, 3);

img_new(:,:,1) = img_r;
img_new(:,:,2) = img_g;
img_new(:,:,3) = img_b;

img_new = uint8( img_new );

end
```