Daemon engine texture packing

**Daemon 0.51 implementation (obsolete)**

- **GlowMap**
  - R: Color
  - G: Color
  - B: Color

- **DiffuseMap**
  - R: Color
  - G: Color
  - B: Color

- **SpecularMap**
  - R: Metalness
  - G: Roughness
  - B: Metalness

- **NormalMap**
  - R: Normal +X
  - G: Normal -Y
  - B: Normal +Z

**Incomplete, unused**

**DXT5/BC3 (DXT5sm)**

- **NormalMap**
  - R: Normal +X
  - G: Normal -Y
  - B: Normal +Z
  - A: Depth

**Daemon 0.52+ implementation**

- **GlowMap**
  - R: Color
  - G: Color
  - B: Color

- **DiffuseMap**
  - R: Color
  - G: Color
  - B: Color

- **SpecularMap**
  - R: Metalness
  - G: Roughness
  - B: Metalness

- **NormalMap**
  - R: Normal +X
  - G: Normal -Y
  - B: Normal +Z

**Recommended texture formats**

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<tr>
<th>Lightmaps</th>
<th>Lossless WebP</th>
<th>Normal maps</th>
<th>Normalized CRN (Unity/Daemon variant with -rtopmip option)</th>
<th>Everything else</th>
<th>CRN (Unity/Daemon variant)</th>
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</thead>
</table>

¹ Do not do swizzle the channels yourself, let the Crunch texture compression tool do it, Z is reconstructed programmatically (normalization ensure proper results).

² Occlusion is not implemented yet, but if provided it must be stored in red channel.

³ Daemon/ioquake3 materials expect DirectX normal convention because XreaL implemented them like Doom3 which followed DirectX convention despite being an OpenGL game.

⁴ Normal map computation from height map is implemented but to be merged after Daemon 0.52.0 release.

⁵ Height scale and offset are implemented in engine and DarkPlaces compatibility layer but not yet in standard Daemon materials at Daemon 0.52.0 release time.