# CashCalc Specification Sheets (Client Facing)

## Income Protection / PHI Calculator

### Overview

The Income Protection / PHI Calculator is used to show the client a contrast between their existing income protection and their potential income protection, and their requirements for this. This calculator takes the client's gross annual salary, existing sick pay, existing income protection, existing income from ill health pension and potential income protection. The sick pay option requires what type of sick pay that they are entitled to, the duration of this sick pay, for up to two types of sick pay income. The existing income protection requires the income protected per week, deferred period, the client's age when the cover ends and if the cover is index-linked or not the income from ill health pension requires the weekly net benefit, the period it will commence after, if the cover is payable for life and if the cover is index-linked. The potential income protection requires if the client wishes to protect the maximum amount of gross salary (60%), deferral period of cover, the client's age when the cover ends and if the cover is index-linked or not.

### Assumptions

Below is a list of all assumptions made in order to perform the calculation:

- Figures are rounded to the nearest penny
- Calculations are done from the date that the forecast is created
- Net Sick Pay is estimated to be 75% of gross salary
- Assumed Inflation Rate of 2.5% per annum
- Weekly net income covered should not exceed 60% of the weekly salary deducting the Income from Ill Health Pension (if available)

### Calculations Breakdown

The calculations require up to twenty-one parameters in order to calculate the given output, these being:

- Gross Annual Salary
- Existing Sick Pay?
- Sick pay type
- Sick pay duration
- Additional Sick Pay?
- Sick pay 2 type
- Sick pay 2 duration
- Existing Income Protection?
- Income protected per week
- Deferral period
- Clients End Age for existing Income Protection
- Existing Income Protection Cover Index-Linked?
- Income from Ill Health Pension?
- Weekly net benefit
- Commencing after period
- Ill Health Pension End Age
- Is Ill Health Pension Index-Linked?
- Cover the maximum available?
- Deferral Period of Cover
- Client's age at end of cover
- Potential cover Index-Linked?

This calculator estimates the existing sick pay income, existing income protection and potential income protection.

The existing sick pay is calculated by dividing 75% of the client's gross annual salary by 52 to get the weekly sick pay from day 1. This value is then multiplied by the number of weeks that the client is entitled cover to get the total. The full total is taken from both instances of the sick pay, if the client is entitled to two types of sick pay. Following are the calculations performed in this process:

$$\text{Weekly Sick Pay} = \frac{(Gross\ Salary\ x\ 0.75)}{52}$$

$$\text{Total Sick Pay} = \text{Weekly Sick Pay x Number of Weeks Entitled}$$

The existing income protection is estimated by multiplying the current protected income by the number of weeks in the term. The number of weeks is calculated by subtracting the current age of the client from the specified end age of the client and multiply that value by 52 and then subtract the deferral period. If the Income Protection is index-linked, it increases along with inflation. Following are the calculations performed in this process:

$$\text{Duration} = (52\ x\ (\text{End Age} - \text{Current Age})) - \text{Deferral Period}$$

$$\text{Total Income Protection} = \text{Weekly Income Protection x Duration}$$

**Index-Linked**

$$\text{Total Index-Linked Income Protection} =$$

$$\text{Total Income Protection x } (1 + \frac{\text{Inflation Rate}}{100})$$

If the client can receive income protection from their pension provider the calculations are as follows:-

The number of weeks the policy will run for is determined by whether the cover is payable for life. If this is the case the term will be:-

$$\text{Duration} = (52\ x\ (\text{Retirement Age} - \text{Current Age})) - \text{Deferral Period}$$

Else the term will be the specified end age:-

$$\text{Duration} = (52\ x\ (\text{End Age} - \text{Current Age})) - \text{Deferral Period}$$

The amount of protection provided is produced by the following calculations:-

$$\text{Total Income Protection (From Pension)} = \text{Weekly Net Benefit x Duration}$$

**Index-Linked**

$$\text{Total Index-Linked Income Protection (From Pension)} =$$

$$\text{Total Income Protection x } (1 + \frac{\text{Inflation Rate}}{100})$$

The current grand total received is equal to the total of the Total Income Protections and Total Sick Pay. Following are the calculations performed in this process:

$$\text{Current Grand Total} = \text{Total Income Protection} + \text{Total Sick Pay} + \text{Total Income Protection from Pension}$$

The potential income protected is calculated by subtracting any existing cover per week from the assigned potential cover per week. If the client wishes for the maximum cover available (60%), then the assigned cover is equal to 60% of the client's salary divided by 52 to make it weeks, otherwise it is the value of Income to cover. Following are the calculations performed in this process:

$$\text{Max Cover} = \frac{\text{Salary x } 0.6}{52}$$

$$\text{Potential Income Protected} = \text{Max Cover} - \text{Current Income Protection}$$

The potential total income protection amount is equal to the potential income protected multiplied by the duration in weeks and then subtract the deferral period. The duration is calculated by subtracting the client's current age from the Client's age at the end of the cover and multiplying that by 52 to convert it into weeks. Following are the calculations performed in this process:

$$\text{Duration} = (52 \times (\text{End Age} - \text{Current Age})) - \text{Deferral Period}$$

$$\text{Total Potential Protection} = \text{Potential Income Protected} \times \text{Duration}$$

The Potential grand total received is equal to the total of the current grand total received and the potential total income protection. Following are the calculations performed in this process:

$$\text{Potential Grand Total} = \text{Total Potential Protection} + \text{Current Grand Total}$$

A PDF report can be created from this calculator which contains detailed information about the relevant client's details and the outputs of the calculations performed.